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THE

# DUTCH AT HOME.

ESSAYS FROM THE "*REVUE DES DEUX MONDES.*"

BY

ALPHONSE ESQUIROS,

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TRANSLATED AND EDITED BY

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IN TWO VOLUMES.

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## PREFACE TO THE ENGLISH EDITION.

WHY did I go to Holland? As the answer to this question will throw some light upon the nature of the following essays, I may be permitted to offer some explanation on that point. I had been living for three years in Belgium—not for my pleasure, but for that of Napoleon III.—shut up in a little town called Nivelles, where folk speak Walloon, and I felt unutterably dull. The name of this town, if not the town itself, is known in France, where the "dog of Jean de Nivelles that runs away on being called" enjoys an incontestible celebrity. Here I formed the acquaintance of some rich and very agreeable Englishmen engaged in making a railway, and it was through their society, I believe, that I was enabled to support the intolerable monotony of Belgian life, after the exciting political crises I had taken part

in. One of these gentlemen, a business man and a witty man (one idea does not exclude the other), said to me one day:

"Why do you not go to Holland?"

"Why there?" I asked.

"Because it is as well to store up in a corner of the mind some grotesque recollection on which you can fall back in old age, and which may throw some merriment over the frigid and gloomy hours of human decline. When you have seen the Dutch you will laugh at them your life long, for they are so droll, so sturdy, so Chinese-like, and they walk in such a peculiar and funny way! You will lay in a stock of humour to amuse you whenever you may feel tired of the world."

I followed my friend's advice, which seemed to me dictated by very sound philosophy, and I set out; but I am bound to confess that, while I congratulated myself on taking his advice, I did not exactly find in Holland what he had promised me, or at least I found a population so honest and so industrious; works so humbly gigantic against the sea; institutions so liberal; the education of youth so wide-spread; riches so fairly acquired by labour, and a nationality so powerful and so intimately connected with religion, that I had not

the courage to be satisfied with noticing a few ridiculous externals.

Another influence took me to Holland. Monsieur Buloz, the publisher of the *Revue des Deux Mondes*, had been to the Netherlands in 1849, at the period when Belgian piracy was waging a desperate war upon his literary property. He had found in Holland a commercial good faith that astonished him, and protection against the buccaneering propensities of the Brussels publishers. Hence he had retained a pleasant recollection of this small country, and desired that somebody disinterested in the matter should make known the manners of a nation, almost forgotten on the map of Europe. He sent me off, therefore, on a voyage of discovery, for in France especially the Netherlands were only known through vague and false descriptions. As I had no greater reasons for living at Nivelles than for residing at Pekin, I very readily set out by the Antwerp railway, which, after introducing me to the soil of the Netherlands, politely left me in the hands of the stage coach proprietors; for it was the beginning of March, the country was inundated, and the iron ribbon of the line was drawn out beneath the water.

My readers know now why I went to Holland,

and if they wish to know why I remained for a year and a half there, instead of confining myself to the simple tour I had proposed, I may say that it depended on personal causes and, possibly, inclinations. I had often said to myself when studying history, that I would much sooner investigate the life of nations, their present condition and customs —in a word, what they do at the present day, instead of what they did two hundred years ago. Opportunities for doing this had hitherto failed me, and it is probable that, had it not been for the *coup d'état* of December 2nd, I should have gone on vegetating like a Paris mushroom in the shadow of the Legislative Palace. But now that events had given me a furlough and afforded the opportunity, I resolved to grasp it tightly. Hardly had I entered Holland ere I found so much to see, to study, and compare, that I involuntarily took root in this damp country.

I hold in great esteem those learned gentlemen who spend their life in deciphering old MSS.; but for my part, I experience infinitely greater pleasure in investigating the mysteries of modern society. If my hair must turn grey, let it be a thousand fold sooner with the dust of highways than that of musty tomes. Besides, is not civilisa-

tion a living book, in which the man who has a taste, or, if you prefer it, a mania for such studies, finds a multitude of things to learn? Enter that hovel, it contains a romance which it is your place to see and discover. Go to sea with the fishermen, and, while watching them eat their black bread, you will have the means to study an entire phase of society. There is a charm in living with all that lives, and in understanding humble joys and humble sorrows. Great battles and brilliant actions occur but at rare intervals in the life of nations; while the observation of manners is a pleasure of every day and every hour. There is, moreover, a grandeur in the mysteries of domestic life, in household dramas, in institutions consecrated by time, and in the genius of races, as you surprise in such the soul and heart of nations, which is not always to be discovered in their history or, at any rate, in their historians.

It will be seen that I was very far from the standpoint it was proposed I should take for the benefit of my mental health, by the Englishman who sent me to Holland to lay in a stock of mirth. I cannot remember ever having written a book so serious—others may say, perchance, so dull—as the "Dutch at Home." The reason is extremely

simple, and I ask permission to explain it in a very few words,

There are only two ways of studying Holland: in the first place, you may proceed thither with the determination to seek subjects for caricature. A small people, so isolated from the general habits of the Continent, offers itself admirably, I confess, to the pen of a tourist who wishes to amuse at the expense of what he sees. The temptation is especially strong for the French mind; and I am not surprised that those travellers among my countrymen who, to employ Boileau's expression, are "born spiteful," should have all fallen into the trap. This criticism, however, which is unjust in so many respects, was exhausted when I set foot on the soil of the Netherlands. Calumniation, mockery, and the French *blague* had passed over the manners of the Dutch, or, at any rate, over any superficialities they presented, and had spared nothing.

Another field remained to traverse, and that, at any rate, was virgin soil. French travellers, led astray by their search for the ridiculous, had forgotten to see the country, its resources, the phenomena of its natural and artificial geography, its battles with the sea, its patience which is as

eternity, and its works which, incessantly renewed, will doubtless endure as long as Ocean.

This new horizon of facts, that I noticed immediately on entering the interior of the country, was much better adapted, I am bound to state, to the temper of my mind at that period. The Netherlands too would have had a supreme defence against the shafts of satire, so far as I was concerned, in the kind-heartedness of the population; for I have ever had conscientious scruples against ridiculing that which is good. Nothing else was left me, therefore, but to enter frankly and seriously into the spirit of the civilisation of the Netherlands. Now this spirit is serious, positive, simple, and minute; and it may be possibly considered that I have made myself too much of a Dutchman in the tone and manner of transcribing my impressions. It is a disease, I confess, I did not try to escape, for it is only since I have been forced to dwell among foreigners that I understand the Indian dogma of metempsychosis applied to travelling, and the charm that may cling to it. Yes, there is a mental pleasure in identifying yourself with the life of another nation, especially with that of a small people which, imprisoned in a territory limited by the sea, and a language which

no one understands, has never yet been able to recount its own history.

I believe that I have by this time recovered from the absorbing effect produced on me by these low lands, by this low sky, by these high tides, which envelope you as in a winding-sheet of water; and by all this narrow, monotonous, serious nature which is so abundant in details that necessarily recall you to the life of facts; but if I had to write this book again, I should make no change in my appreciation of the Dutch. Their history is glorious, for they conquered at an early hour, liberty, and have known how to defend it; and their present condition, though obscure, is worthy of envy, for, with the slight resources of a country which they have constantly been compelled to draw from the deluge, they have forced nature to open her reluctant hand, and have learned to be rich by contenting themselves with little.

I will now offer to others the advice which I am glad that I followed myself. Go to Holland, I say, not to seek there objects for ridicule, which may be as well found elsewhere; but to study the living history of a society offering unique and enduring features, which, after creating its territory, its navy, its laws, its representative govern-

ment, its powerful municipal institutions, and its family life, retains an energetic resolution of living at home, without fearing or disquieting others.

The Dutch stamp is conspicuous and strong. Swedenborg, that most amusing of visionaries, asserts that he met in the other world Dutchmen engaged in digging canals. I have not, for my part, the remotest conception of what the Dutch do there; but if it be true, that the habits of the present life are continued in the future life, I would safely affirm that the inhabitants of the Netherlands are distinguished from other men by indelible characters.

On winter nights old Holland often rises before me, with her inundated polders, her Zuyderzee islands beaten by the waves, like vessels riding at anchor, with her busy mills, and her plains so opposed to the barrel of the Danaides, because they are constantly dried up and as constantly filled with water again. I see once more the old towns where the steeples reel among the masts, the Neptunian race, and the Frison heroines with their golden helmets, who seem so confident in their beauty. On leaving Holland I bore with me gentle memories. In her example of labour subjugating nature, in the sweet pictures of pastoral life, and scenes of

tranquil happiness which warm the heart chilled by great political disasters, Holland has reason to be proud of her history, for, after having extricated herself from the hand of Philip II. and having resisted the triumphant armies of Louis XIV., she was one of the first countries in Europe to shake off the ignoble yoke of the First Empire, and regain with liberty the consciousness of her value. At the present day, mistress of her own destinies, she has in the sea the means to defy all foreign despotism.

ALPHONSE ESQUIROS.

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THE

# DUTCH AT HOME.

## CHAPTER I.

FORMATION OF THE TERRITORY—STRUGGLES OF LAND AND WATER—THE SCIENTIFIC COMMISSION—HAARLEM—PRIVATE INSTITUTIONS—THE TEYLERIAN MUSEUM—THE RHINE—GRANITIC BOULDERS—THE DECAY OF RIVERS—THE INUNDATION OF 1855—WEENENDAAL—PUBLIC CHARITY—A VISIT TO THE SPOT—RECOVERY OF NATURE.

THERE is a country in which, if we may employ the expression, the rivers flow suspended over the heads of the inhabitants: where large towns stand below the level of the sea, which commands and menaces them: where portions of the cultivated soil have been in turn invaded, surrendered, and recaptured by the waters: where the natural course of the rivers has re-attached ancient isles to the continent by a bond of sand, and where old portions of the continent, destroyed and wrecked, have formed recent islands. At the sight of such a strange geographical constitution, which diverges

from all known laws, we can hardly feel surprised that with a handful of men Holland should have seized and maintained her independence; that, without stone quarries, she should have built cities and remarkable edifices; that, almost without wood, she should have built vessels which disputed the lordship of the seas with the most formidable fleets; nor are we astonished that with sterile inundated fields which defy the ploughshare, she should have rendered her cities cattle-markets and granaries of abundance. What astonishes us before all is that such a country exists, and that which interests the traveller more than the variations of landscape, the character of the inhabitants, the extent and prosperity of the territory, is the mystery of a singular formation and destiny, which are explained partly by nature and partly by human industry.

Flat and level as a perfectly smooth sea, indented by gulfs and bays, occupied by internal lakes, and irrigated by rivers which ramify into several small streams, the soil of Holland appears to have been the theatre of a struggle between land and water. The present state of the country—a species of compromise between the two elements—is evidently the consequence of curious events and peculiar causes. But these events are not so old as might be believed. When science wishes to go back to the geological cradle of the other parts

of Europe, it is compelled to appeal to those memorials about whose interpretation history is dumb. Human genius follows through darkness and ruins the thread of those events which must have been accomplished on the earth at a period when, according to all probability, man was still absent from creation. In Holland, a more singular and more novel spectacle is presented; the gulfs, lakes, groups of islands, and alluvial soil which constitutes entire provinces, man saw spring into existence. During the historic period he has witnessed the mouths of rivers closed by the constantly growing deposition of sand, he has watched the land being converted into water, and the inner seas being dried up.

Several of those physical causes to which naturalists refer the very ancient changes that have taken place in the economy of the terrestrial globe —such as deluges, winds, tides, movements in the level of the land and sea—have remained in full activity on the soil of the Netherlands, even since the establishment of cities. Long after the structure of the European continent was arrested more or less, Holland began, pursued, and even at this day is pursuing the course of her geographical formation. The natural history of the variations of the soil in this country, therefore, offers a peculiar interest. This history is connected with the social destinies of the people inhabiting the

Netherlands; it is the geology of yesterday and to-day, geology in action, and even, from a certain point of view, political geology.

Hitherto travellers and annalists have too much neglected the reconstruction of the physical stage on which the various civilisations of Europe have established themselves. The date and nature of this stage, the conditions amid which it was formed, are, however, allied with the essential facts of the nationality. The peoples are what the external influences of the country they inhabit determine them to be, or what the water, sky, and land make of them. The value of these topographical causes is further augmented, when a nation is placed in the unique conditions of a position between the continent and the sea. The geography of such a people, in this case, becomes the preface of its history, and the root of its manners, institutions, and genius.

By the aid of authentic documents we can learn what Holland was at the outset, what changes it has undergone under the action of the rivers and the sea; in a word, how Holland was formed. The terrible power of the waters was revealed a few years ago in the inundations which desolated several provinces of the Netherlands; and we purpose to study it in the scene of the late disasters. The action of the sea we shall be enabled to observe in the region of the dunes;

that of man, all over the territory, but especially in the neighbourhood of Haarlem. The elements of the geographical history of Holland will hence be supplied us by natural memorials, completed by documents obtained from the scientific collections existing in the Low Countries, and which are too little known.

In 1851 a commission was appointed to explore the Netherlands scientifically. This commission established its head-quarters at Haarlem, a city celebrated for its organs, the siege it sustained from the Spaniards in 1572; and the honour of having given birth to Laurence Coster, who is regarded in Holland as the inventor of printing. Another motive induced the commissioners to select Haarlem, namely, the abundance of scientific documents which it contains, for the inhabitants have ever had a taste for collecting. It is well known that Haarlem is the city of flowers; here live the descendants of those famous tulip amateurs who staked their fortune and self-love on a bulb. At the present day it is no longer a mania, but it is still a taste, and a most delicate one. There is a perfect art in creating new varieties, assembling colours, producing artificial ornaments, in a word, inventing flowers which nature had not foreseen. Even if a man be not a connoisseur, it is impossible for him during May not to look with interest on the rich gardens of hyacinths and tulips, growing

in the open places, at times even on the sand of the dunes, and looking like a Persian or Cashmere shawl. From collections of flowers, the public taste progressed to collections of artistic objects and those connected with natural history. Most of the travellers, however, who fly through Haarlem on the wings of steam, do not even suspect the existence of these riches. In France, scientific treasures are palpable, but in Holland they must be sought. These deposits, which are *chefs d'œuvre* of patience and study, the majority of the inhabitants themselves are ignorant of; books do not mention them, and a modest solicitude keeps them religiously under lock and key. In this country science is discreetly wealthy, but for all that it is not avaricious. A true Dutch urbanity, unpretending and liberal, readily opens the door to amateurs.

At the head of the estimable institutions that flourish in Haarlem, stands the Dutch Scientific Society, of which Van Breda, a distinguished Professor, is perpetual secretary. This society has existed for more than three hundred years, and it is curious to see a species of academy independent of the State, which, supported by the annual contributions of some thirty members, possesses a natural history collection, gives prizes of one thousand florins, and publishes a great number of memoirs. These private undertakings belong

thoroughly to the manners and character of Holland. At Haarlem lived an honest man of the name of Teyler; he was no savant, but a manufacturer and citizen of the town; however when he died, he left a considerable amount to found, among other establishments, a Museum, which bears his name, "the Teylerian Museum." In a house externally simple, but internally vast and splendid, are hid away a library rich in scientific works, a gallery of paintings, among which are the best specimens of the living Dutch school, a mineralogical and physical collection, and a rare display of fossils.* Our readers will perhaps be surprised to learn that this museum, whose treasures all the cities of Europe might envy, was founded for only twelve persons to visit at a time. More liberal even than the donor, the present directors admit the Haarlem public twice a week to this sanctuary of art and nature; but it is a toleration, or we might almost say, a generous infraction of Mr. Teyler's will.

At the gates of Haarlem there is a wood rivalling in beauty and pleasantness that at the Hague.

* Among the ruins of the Old World, I noticed four fine specimens of the *mystriosaurus*, a reptile which lived and ran about on land; a series of insects found in the Jurassic strata; debris of the *squallodon*, a great sea-serpent; eight examples of the salamander; some bones of the giant bird of New Zealand; and many other unique or valuable memorials of a creation that has passed away.

Both of them have been touched up by the hand of man, but with that delicate perfection of art which respects nature while adorning her. No more delicious walk can be imagined in summer: the parks in which stags and deer wander half at liberty, the islets peopled by swans, the pieces of water studded with masses of fresh and luxuriant verdure, the clear-obscure that suddenly intercepts the light, and the silence only troubled by the notes of the song-birds—all this resembles enchantment. Some portions of the Haarlem wood are evidently of recent plantation; but in the gloomy glades, you come across aged and majestic trees, bearing a family likeness to those at the Hague. Naturalists have even believed that these two woods were the fragments of an ancient forest, once situated at a great distance from the sea, and destroyed by the revolutions of the soil.

At the entrance of the Haarlem wood, in an ex-royal residence, now converted into a picture-gallery, the commission of national geology deposited the result of their researches. This collection of antiquities natural to Holland is still in an embryonic state, but for all that curious specimens are found there—peat in its different stages of formation, the sediment of the rivers and seas that bathe the coasts, the various strata found in the Artesian wells at different depths, and numerous fossils of the tertiary epoch resembling those found in the

vicinity of London, Paris and Brussels. The commission, composed of three members, Van Breda, Miquel, and Staring, intends to publish a geological chart of the Netherlands. With the help of the materials already collected, an idea may be formed of what this chart will be. Sandy or clayey in those districts situate near the sea, the soil of the Netherlands is transformed into chalk on the German frontier, and into thin coal beds in the direction of Limburg.

The formation of the Dutch soil under the action of fresh water may be divided into three epochs: a period anterior to the existence of the Rhine, another period during which the river opened itself a passage to the sea, and a final period during which it traced the present form of Holland.

Prior to the birth of the Rhine, the greater portion of the Netherlands was a sea. Bordered on the side of Germany by a chain of rocks, this sea has left in its old bed deposits of marine shells, and bones of the whale, rhinoceros, and mammoth, crushed and broken. These colossi of the old world are found everywhere, and the German ocean is full of such debris. The most surprising thing connected with this dried-up ocean is the presence of enormous granite and gneiss boulders, whose origin is now known. The masses whence they were detached have been found in the mountains of Scandinavia.

Only one question remains for solution: how did they get here? According to all probability, these masses of rock came from Sweden and Norway on ice-rafts. The existence of these travelling icebergs is no geological chimera, for they move about on our seas. These floating isles, some of which have the white and crystalline lustre of sugar, are frequently seen, and some have even reached the Cape of Good Hope. At the period when Holland was still under water, these ice-banks arrived from the polar seas, or they might have been ruins of the enormous glaciers which fell from the Scandinavian mountains into the sea. The rock boulders fell pell mell with them, and being hurled far from their natural site by the rapidity of their fall, were carried off on their travels on the ice-rafts that traversed the ocean in all directions. These erratic blocks are found in large quantities, and the German ocean is paved with them. It is probable that when the ice-rafts melted, most of these blocks were stranded on sand banks, or possibly on a few low islands, whence they emerged above the water, like Druidic stones in a field of wheat.

At the remote period we are discussing, the whole imposing mass of the Ardennes rose to form a rampart between this ancient sea and the swollen lakes in the interior of Germany. The sea beat against the chain of mountains, the erratic blocks

were driven into cavities in this wall, and were affixed to its side, like a stone hurled by a sling. One day (if we may apply the term to these epochs of nature), either through an impulse being given the fresh water by earthquakes, or by the force of gravitation alone determining a conflict, the Ardennes and their dependencies were broken through and the lakes, imprisoned in a girdle of rocks, were set in motion. The obstacle was gigantic, but it yielded, for the rocks, which human language has selected as a term of comparison to express the strength of resistance, always yield in nature to the formidable and slow power of compressed waters. A portion of the mountains was carried away, and this first leap of the Rhine into the sea was terrible. The opening through which it rushed still remains, visible and yawning; this opening, much larger than the present course of the river, shows by what a mass of water the primitive barrier was forced. The traces of such a prodigious flood are not yet effaced on the soil of the Netherlands; the eye follows them for a long distance; and the ruins of the Rhine wall have been carried an enormous way on either side. The relics of the immense breach formed by the river have served to form entire provinces: Gelderland, Over Yssel, and the Texel are covered with pebbles, in which we recognise fragments of the basaltic rock, granite and porphyry,

which border the course of the river in Germany. These Titans of the mineral kingdom were crushed by the explosion of the waters.

As we see, the Rhine formed itself; it hollowed out the stormy track which was to lead it to fresh formations. Here we leave the night of ages and conjectural geology to enter into the region of positive geology. Everywhere rivers delineate the physiognomy of the countries they traverse; but the action exercised by the watercourses is nowhere so strikingly manifest as in the configuration of the Netherlands. It has been said that Egypt is a present from the Nile; and we might say, with no less truth, that Holland is a gift of the Rhine. It would be unjust, however, to give the Rhine the sole honour of this geological formation. The running waters of the country constitute with a thousand windings the two sides of a triangle, of which the ocean is the base. The earth, composed in great measure of fluviatile alluvium, and which is contained between these lines of water, hence offers the form, more or less regular, of the Greek delta. Holland is a delta of the Rhine, the Meuse, and the Scheldt.

Most travellers have contented themselves with describing the present state of the Rhine, for otherwise they would have been obliged to open up a fresh series of studies, and write the history of the river. We have seen that the Rhine has

not always existed; at the present time it is not what it was at its birth; the direction of its waters, and the level of its bed, have varied within the historic age. Unreflecting men easily imagine that nature does not change; but the man who looks back for ages, and consults the memorials of science, soon recognises that there are no eternal forms in the physical world. The course of rivers itself is temporary and provisional, and subjected to all the causes of variation which exert an influence on the general economy of continents. The law that regulates these changes must be known, if we wish to explain the events which have traced the present shape of Holland. This law is as follows:—Two great forces, the rivers and the sea, are in a state of perpetual antagonism on our globe. The mass of running waters meets at its mouth the opposing action of the waves, tides, and sands. Holland, more than any other spot in the world, has, since its origin, been the scene of this natural contest; we may even say that the existence of the Netherlands is due, in great measure, to the rivalry of the Rhine and the ocean. The history of the river, from this point of view, deserves all our attention, for it is connected with the physical history of the country we are trying to become acquainted with.

We have seen by what obstacles the waters were restrained; but once the passage was opened, the

old opposition between the ocean and the Rhine began. At the outset, the river gained the advantage and the ocean recoiled. All geologists know that the strength of rivers is great enough to throw into the sea alluvial soil, which, after a certain number of centuries, prolongs the extremity of continents. The soil of Holland was built and extended by virtue of this mechanical law. Formed of travelling sand, which the Rhine brought from Germany, Holland floated (if we may use the expression) on the waters of the river, held for some time in suspense by the stormy rapidity of the current, until it was deposited, layer on layer, in the bed of the ocean, which beat a retreat.

The progress of the delta, however, did not take place without immense reactions. The sweet and salt waters disputed in turn the terrain now occupied by two of the richest provinces of the Netherlands. Still the river had a marked superiority; it drove back the sea, and all testifies that the relative level of the coasts and the tides differed at that period from what it now is. Then, by one of those changes of fortune which affect even the powers of nature, the result of the contest appears to have turned, for two thousand years, in favour of the ocean. The Rhine was conquered; in the humiliated course of its waters, it displays the feeling of its decadence. Do you hear its complaint? That stifled murmur of the waters which

remember their past grandeur may be poetical, but it is also historical. The Rhine, so frequently referred to by the authors of the seventeenth century, ends, like the reign of Louis XIV. ended, in divisions and weakness.

The course of rivers may be compared to that of human life: it has an infancy, an adolescence, and an old age. The old age of the Rhine is not without melancholy or singularity. To the north of Cleves, a little below the village of Pannerden, this river is divided into two branches, one of which takes the name of the Waal, while the other retains that of the old Rhine. Speedily weakened by new divisions, losing at each step its waters and its name, the haughty river of great Germany runs miserably to its ruin. What, is that the Rhine? The inhabitants themselves no longer know it; they call it "the Gallows water." That is not all: art was obliged to come to its aid and lend a hand to convey it to the sea; for, at the beginning of this century, it died away wretchedly in the sands.

All the rivers of Holland are in a state of decadence. The Meuse appears to have been less subjected to changes than the Rhine, but its mouth, near Brielle, has grown narrower during even two centuries. From this point William III. proceeded to England with his fleet, on April 22, 1691, while now a small fishing boat can

scarcely enter the narrow passage. A Dutch author has shown that in 1606 this mouth was four times wider than in 1730. The Scheldt has also lost much of its importance: its mouth has been altered by the irruptions of the sea. This change in the course of the rivers has not been effected without great internal perturbations. In this country the inundations have been to a certain extent periodical; the immobility of the sea opposed to the force of the running waters, the tendency of the rivers to silt up their mouths, the violence of the south-west winds, the abundance of rain, especially in winter, and the thaws, —all these causes combined have made the streams overflow. The waters, in spreading, have left in the country marshes, lakes, almost inland seas, whose successive formation has contributed in no slight degree in changing the physiognomy of Holland within historic times.

The history of the inundations known is long and lamentable. By the aid of old maps, and commemorative notices which Mr. Bodel Nyenhuis, a rich inhabitant of Leyden, has in his geographical collection, we have been enabled to follow, especially since 1702, the traces of these repeated scourges. Our century had witnessed two fluvial inundations which have a sorrowful celebrity, those of 1809 and 1820, and to these must be added a third date—1855.

It was in the month of March, after a hard winter which had suspended the course of the Rhine and the Meuse. Spring arrived suddenly for that portion of these rivers to the south, while the northern part remained petrified beneath the ice. The solid surface of the Rhine being broken up, the thaw met in Holland a mass of the still frozen river. A motionless river and moving ice-blocks came into a fearful collision. The force of resistance being opposed to that of expansion must necessarily entail a catastrophe. There was a solemn and terrible moment, during which the river, contending with itself, uttered a hoarse roar. All at once the bed of ice rose and burst, and the tumultuous strength of the waters, exasperated by the heavy clashing ice-masses, no longer knew obstacles or restraint. The river roared and rose like a sea, and overflowed its banks. Though the dykes were so strong and tall they were carried away, cut asunder by the ice as by a razor-blade. The whole country became a sheet of water; it was no longer a breaking-up of the ice, but a deluge. The ice-lumps were hurled on ice-lumps; and these ruins of the thaw destroyed, tore away, and crushed everything they met on their passage. Lofty oaks fell shattered in the constantly rising waters. On all sides the floods rushed up like a pack of howling wolves. The Rhine had already seized upon

one-fourth of Gelderland and the province of Utrecht, and a portion of North Brabant had disappeared beneath the waters of the Meuse. It was hopeless to search for the fat prairies, the smiling polders, and the splendidly cultivated Dutch farms; all that was beneath the level of the two rivers disappeared, and was covered by the angry, seething waters. In some places they rose above the roofs of the houses, and frail boats, surrounded by a belt of moving and floating rocks, alone struggled against this tempest of ice.

The ramparts and bridges were swept away. From steeple to steeple the tocsin rang out, and the alarm guns were heard along the menaced line. An infinite desolation fell with night upon the villages and farms. The words "The dyke is burst!" could be heard in all the tones of grief and horror. Men were afraid for their homes, their rural riches, their winter stock, their cattle: they feared for themselves, but before all, for their wives and children. Before the foe who advanced, stern, irresistible, and inevitable, the abodes were abandoned; the inhabitants sought shelter on the hills, and on buildings standing on an elevation, such as churches and mills. From these spots the terrified people surveyed the submerged fields, and the villages in which they had left friends. Do you see down there that house in which a faint light is burning? A female

shadow is designed on the window panes. That woman refused to take to flight. An enormous ice-mass dashes against the house and carries it away. Each moment roofs, furniture, corpses of domestic animals pass in a whirlpool of water and ice. Alas! did you not see an empty cradle floating along? What has become of the infant? What has become of the mother?

A gloomy, taciturn pity—icy as the sky—at first stiffened every arm; but all the courageous men did not yield to despondency. The disaster was great, but great too was the devotion, and man proved himself as magnanimous as nature was inexorable. It was a glorious thing to see, in the midst of this scourge, unhappy men coldly struggling against dangers, not for themselves, but for their fellows, whom they brought ashore, trembling, fainting, but saved. Despair, terror, joy, all the emotions which render a man insane combated in the midst of the confusion of the elements, as if the laws of both the physical and the moral world had been overthrown.

The inundations of 1855 present three great scenes: 1, the country submerged from the Wesel up to the river Yssel, and even further, near Deventer, and up to the Waal, near Nymeguen; 2, the country between the Meuse and the Waal, and between the Waal, the lower Rhine and the Leck; and 3, the valley of Gelderland.

The deluge, regarded in its entirety, defies to a certain extent human comparison, for it is one of the infirmities of our nature not to be able to survey the whole of anything, not even of great misfortunes. We will, therefore, fix our attention on one of the salient points of the disaster. At a little distance from the railway connecting Utrecht and Haarlem is the small village of Weenendaal. Situated on old peat-beds long ago worked out, and which have left a damp soil intersected by ditches full of water, especially in winter, it is inhabited by a poor population, whose chief employment is wool-spinning. It was 144 years since the village had been inundated, and this long time had inspired the inhabitants with a dangerous confidence, and made them neglect the precautions induced by the nature of the soil. On March 5, 1855, they learned that the dyke, situated between two hills, which served as a rampart to the Gelder Valley, had burst. Messengers on horseback brought each moment alarming news. The nearest village, Elst, had been seized by the inundation. The inhabitants proceeded at once in the direction of the scourge ; but when they had gone half way, they met a panting, frightened peasant, who advised them to return, lest they might be cut off by the enemy. They did so, and on entering their village, read alarm on every face—the women were heart-broken, and the infants clung around their mothers'

necks with cries of distress; but the young men were helping to place the furniture in carts, and saving the cattle and the sick. Still the waters did not appear, but at two in the morning the ice could be seen glistening in the moonbeams upon the advancing tide. The terror was universal; the inhabitants of the lower parts of the village sought shelter at higher spots, and specially in the church, into which the poor fugitives rushed, as if asking hospitality of God. The night passed away in indescribable agony; on the morrow the waters penetrated the village, and invaded successively the streets and the highway, on which boats were moving two days later. The highest parts of Weenendaal were reached, and boats passed over the market-place as if it were a lake. Fortunately, during these mournful days, the sky remained calm; had the wind risen, one-fourth of the province would have been destroyed.

Such disturbances of nature were followed by even a more sorrowful scourge, hunger. The wretches who had sought shelter in the church had no food. Bands of women, children, and aged persons wandered silently and sadly round the scene of the inundation, seeking firm ground and a roof to shelter their heads. Owing to the congregation of all this human wretchedness in barns, maladies began to break out. Five hundred of the poorest inhabitants of Weenendaal were

then removed to Utrecht, in which ancient city a church was got ready for their reception. Gifts flowed in; linen, clothes, and money were sent them. A committee, voluntarily formed, received the offerings, and distributed them. We visited the poor drowned-out people in their church at the hour when they were dining together at very simple tables, which however were clean and abundantly supplied. Their faces revealed an indifference and even a joy, which contrasted with their sad condition. The truth is, that several of them had never been so well treated before; public charity afforded them a season of leisure, which pleasantly succeeded painful emotions and a life of hard toil. An old woman, who was asked if she did not feel tired, answered with touching simplicity, "Why should I feel so when I have nothing to do?" Most of the wool-spinners, however, had resumed their ordinary occupations, and the busy wheels quivered beneath their fingers. Some of these women had that beauty of misfortune which affects the soul. Their attire was rustic, but suitable. The ladies of the city had in the first instance sent articles from their wardrobes to dress these unfortunates; but the president of the committee considered with correct taste, that these fashionable clothes would render the poor village women the living caricatures of public beneficence. Most of the women had children, and some had even been

confined since the catastrophe. These poor little creatures with their blue eyes, light hair, and faces unconscious of woe, were caressed by their mothers with a pride and tenderness which had nothing studied. In all conditions of life, in all ranks of society, woman never shows herself so truly a mother as after a danger which has placed in doubt her existence and that of her infant. The church converted into an asylum had been appropriated not without art to the new destination, or if we may venture to use the term, to the new worship established there. The duties of the day were marked by ringing the bell; the most perfect order prevailed, and gratitude was visibly the bond of discipline. One part of the building was set aside for the night; men and women slept separately on straw mattrasses. In this church, whence the religious service had retired to make way for the relief of human misery, Christianity had returned to the history of the Manger. Walls once sanctified by prayer but now sanctified by public charity, victims saved by that feeling which does the greatest honour to modern civilisation, suffering consoled — all this was well placed in the abode of Him who preferred mercy to sacrifice.

On the day after our visit to the church, we proceeded by railway to the scene of the inundation. By the same train, some women we had

noticed in the church were returning to Weenendaal; they were going to find again their poor homes, and convince themselves of the extent of the disaster. The railway had also been struck and injured by the waves, and the traffic had only been restored for a week. On reaching the station nearest to Weenendaal, we asked for a carriage to take us to the village; we were shown to a boat—the roads, in fact, were still under water. It was a sad and painful excursion, for truth to tell, we went but to reconnoitre a lost village. The mere sight of the localities could furnish an idea of the ruin the villagers had sustained. At each instant along a deep ditch which had formerly been the highway, we met with roofs from which the tiles had been stripped, beaten-in doors, broken windows, and barns suspended sadly on the exposed piles, in a word, the skeletons of houses. Elsewhere, there was nought but fragments of masonry, heaps of ruins and bricks in a nameless medley. The further we advanced into the village, the greater grew our emotion at the sight of these habitations without inhabitants, this little church which had served as an ark amid the deluge, and these streets which were now a stream. Our boat stopped, and we entered a few houses in which the least badly treated of the poor people were busied in repairing what could still be saved of their furniture and

instruments of labour. An undulating line marked on the inner walls the height to which the water had risen. We had everywhere before us desolation, destruction, and misery.

The boat we had freighted started again, and proceeded toward the adjoining fields. It was one large sea, above which rose the crests of trees. A flock of ducks swam noisily round our boat, and by their joy insulted the melancholy character of the landscape. As far as the eye could see, water, nothing but water, was visible. A sunbeam spread like a smile of reconciliation or of irony over this valley, once dug up by the pick and the ploughshare, but now furrowed by the oar. Could we have forgotten man, we should have found pleasure in the contemplation of this lake, beneath which the crops and hopes of the year were buried, for nature is lovely even in her ravages. We had the curiosity to see the spot where the dyke of the Rhine burst; the wound through which the river had shed its waters was closed by temporary walls. The sight of this scar cicatrized in the flank of the giant was well adapted to inspire a grand idea both of the works of man and the tumultuous strength of nature. As for the Rhine, it had returned to its bed, tranquil and slumbering like a lion in its den, after a successful foray.

If man prove himself superior to the blind power of the elements, it is especially through his

moral courage, self-forgetfulness, and the exercise of public generosity. Poetry and painting speedily seized on these local scenes in which the terrible proportions of the scourge were equalled by the sympathy, admiration, and pity displayed. In the country inundated by the Rhine, it was seen what the feeling of duty could effect when contending with the fury of the elements. In the presence of such a calamity, and witnessing such distinguished heroism, all Holland was aroused. A subscription was opened and became a public affair; the Hague alone contributing 65,000 florins. In this country where every one is to a certain extent threatened by water, in his home and his altars, there exists among all the Dutch a touching and sudden fraternity for the victims of each great inundation. This compassion springs from the community of danger, but it is also in the blood, for the Dutch race is generally charitable. The emotion produced by the disaster spread beyond the frontiers of the country, and succour for the victims of the inundation arrived from England, Belgium and Germany.

The waters retired, but did so slowly, and this retreat discovered more and more the extent of the ravages. Enormous stems of trees were cut through by the ice, and houses undermined by the waters crumbled away daily. Still the landscape came to life again. It was a sadly beautiful

sight, unique in the world, to witness this archipelago of islands, these farms, these fields and villages emerging with the spring from amid the waters of a subsiding sea, like the bather who moves in the sun his reinvigorated limbs. Gelderland, Over Yssel, and North Brabant displayed themselves more fertile than before the inundations. The doves came, as in the time of Noah, to see that the land was dry, and restored hope.

It had been for a long time proposed to dig a canal through the province of Utrecht to the Zuyderzee; and the waters of the last inundation traced the plan of this canal, as they cleft their way to the gulf. We might say that the Netherlands obtained thence a new temporary river.

The changes thus introduced in the configuration of the delta by the overflow of the rivers must have been considerable. At each new inundation sterile lands were fecundated by the mud of the Rhine and the Meuse, a species of migratory manure the waters bear with them, while other fertile parts of the province have, on the other hand, been changed into sandy plains. At some points the land has risen, at others it has sunk. This action of the rivers is slow, and it requires several successive deluges to verify it; but we must ever bear in mind that centuries are as the sand in nature's hour-glass. These changes would be the more rapid, if the hand of man were

not ever present to efface the traces of alterations, and to restore the country to the artificial conditions of cultivation. In olden times, the beds of rivers were far more capricious than now, and the intervention of man less efficacious; hence the inundations must have been more frequent, and the consequences much more serious. A great part of Holland consists in fact of ground of recent origin, principally due to the action of the waters. The historic age has seen it come into existence, and it is still being daily produced under our eyes. Those deluges which elsewhere belong to ancient, almost to fabulous, history, here constitute quite modern history.

Numerous researches have also proved that the soil, whose origin is referable to the sweet waters, alternated in Holland with that deposited by the salt water. In order to explain the mystery of this new formation, we must necessarily turn to another order of natural phenomena, which are peculiar, more or less, to the geography of the Netherlands.

## CHAPTER II.

THE SEA—GEOGRAPHICAL CHANGES—THE SAND DUNES—THE COAST—DESTRUCTION OF VILLAGES—FORMATION OF THE ZUYDERZEE—SCHEVENINGEN—PRIMITIVE ISLANDS—HELIGOLAND—RECOVERY OF LAND—RECENT INUNDATIONS.

We have boldly sketched the history of the fluvial inundations, but Holland has an enemy more terrible still in the sea. The Rhine and the Meuse have several times desolated this country; but, like the Nile, these rivers fertilise while ravaging. It is not so with marine inundations; for they, on the contrary, leave behind them sterility and death. We have said that the Rhine, in its struggles with the ocean, appears to have been conquered, and the defeats of the river may be estimated by the encroachments of the sea on the Netherlands. Our attention will now be directed to this progress of the sea.

That the primitive shape of Holland has been altered in the course of ages, and that owing to successive invasions of the sea, the extent of the country has been more and more circumscribed,

is a fact to which both doubtful traditions and positive documents bear witness. There is an old story, that in remote periods the English coast could be seen from that of Holland. One of the most considerable changes a portion of the Netherlands suffered, according to some geologists, is referable to the cataclysm which separated Great Britain from the Continent. It can be easily assumed, that when the tongue of land, extending between Dover and Calais, was broken through, the sea must have maltreated the old coasts of Batavia.

We will not dwell on these stories, more or less fabulous, as to the date of which scientific men are not agreed; for there is another series of more certain memorials which prove that the physical constitution of the country has changed within a comparatively recent period. It is sufficient to view attentively the coast of South Holland to judge for oneself of the extent of the changes introduced in the shape of the delta. The desolate coast which stretches from Ostend to Haarlem, and from Haarlem to the Helder, the dunes, sapped by the waves, and the torn sandbanks, all bear the traces of ocean ravages. In the month of March, which is that of storms, we have seen the Dutch coast beaten by the furious waves, impelled by a formidable westerly wind, and we fancied that the earth must be submerged.

It is unfortunately too certain that the barriers

erected against the waves have yielded, one after the other, on more than one coast, within historic times. Chains of dunes have been devoured, and the loss constantly grows greater; indeed, the day may be calculated when a dyke will have to be substituted for this natural defence. It is solely by means of artificial ramparts that, further to the north, a few spots have been maintained against the assailing forces of the sea, and even these stone works are beginning to give way. The very shape of Holland is in contradiction to that of other deltas, and this fact indicates a slow, but continued alteration. Three rivers, like the Rhine, the Scheldt, and the Meuse, which simultaneously discharge their waters almost at the same geographical point, must formerly have formed a promontory jutting out into the sea, or, at any rate, a tongue of land resembling that formed by the Mississippi. Now, at the present day, we may seek this promontory in vain; the outlines of Holland, on the contrary, have been compressed till they form a concave curve.

The sea is ruining the coast of Holland; that is an established fact; the eye can follow this silent and gloomy labour of destruction in the washing away of the sand; but even more irrefragable witnesses of this perpetual cataclysm are in existence. At Katwyk, near the spot where the Rhine, aided by magnificent works, laboriously

falls into the sea, we saw at low water the foundations of a Roman castle (the house of the Bretons), which commanded the mouth of the river at a period when the Rhine, younger and more vigorous, threw itself into the sea. This is an evident proof that the soil is disappearing, but it is not the sole one.

The remembrance has been kept up of an ancient forest which formerly covered South Holland, and even extended a considerable distance towards the north; the trees found buried in the peat-beds, about six miles from the coast, are, in all probability, the corpses of this ancient forest, which the wind and inundations buried, or the axe destroyed. All leads to the belief that these giants of the northern vegetation grew on land at that time remote from the coast. These conjectures have, as their foundation, certain positive facts. Several peat-beds, which owe their origin to sweet water, are now found, especially near the Zuyderzee, beneath the level of the sea. All in the present physiognomy of the delta, therefore, indicates vast and profound revolutions. A portion of these changes was accomplished almost without disasters; but, on other occasions, man was not only a witness of, but actor in, this grand drama of nature. The old inhabitants of Holland perished by thousands through the intestine warfare of land and sea. The geographic events in which towns,

villages, and entire populations, have been mixed up since the Roman era, supply the subject of a sorrowfully authentic history, in which neither dates, nor the narratives of contemporaries, are absent. Holland, that vast raft floating on the waves of the German Ocean, has many times had its flanks torn by the tempest, and men, flocks, and wealth carried off.

During the Roman era, there was a very fertile plain at the spot where the Ems entered the sea by three arms. This low country threw out a promontory to the north-east in the direction of Emden. In 1277, a deluge destroyed a portion of this peninsula, and thirty-three villages perished. To this invasion of the sea is owing the existence of the Dollartzee, that gulf whose name means in Dutch "the furious," doubtless expressing the impetuosity of the shock which burst the natural defences and opened a passage to the waves. Other inundations took place at different periods in the course of the fifteenth century. In 1507, only a portion of Torum, a considerable town, remained standing, and the remainder was eventually carried away in spite of the erection of dykes and barring the rivers: fifty monasteries were swallowed up and disappeared in the waves.

One of the most memorable enterprises of the sea was that which took place on November 18, 1421. Seventy-two villages stood on a collection

of islets formed by the sands of the Meuse: in an instant a desert of water was substituted for the sand. The tide had burst a sluice near Wieldrecht, of which only the name now exists. Thirty-five villages were irrevocably lost; not a trace of them can be discovered, save an old, gloomy, solitary tower, called "the House of Merwed." At a later date, in order to fix the spots where the fishermen might be permitted to cast their nets, the course of the old Maas, which traversed the country before the submersion, was conjecturally re-constituted. What a gloomy and biblical image of the Deluge was this search in the water for the place where a river had been! The spot where the villages were destroyed still bears the name of "Biesbosch," or the wood of reeds.*

All those who have visited the Hague know the village of Scheveningen, to which one of the prettiest roads in the world runs. Scheveningen was formerly at a distance from the sea, and now

* Local chronicles are connected with these exploits of the sea. It is said that a boy of one of the villages over which the inundation was about to burst, while drawing water, brought up some sea-fish. Greatly surprised, he divulged the fact, but was laughed at. He, wiser in his generation, resolved to fly, and a few days later the catastrophe happened. The boy was the only person of his village saved. Unfortunately, the tradition adds, that the boy, when he became a man, made a bad use of his sagacity: he robbed, and was hung.

stands on the beach. In 1570, one-half the old village disappeared in the sea. The present church, whose pretty steeple seems to ask mercy of the sea, was built amid the sands, in the place of one constructed two miles nearer the coast in the centre of the village of that day, and which was destroyed. Further on at Katwyk, another fishing village, the sea carried off eighty houses in fifteen years. So far back as the seventeenth century, there were two streets which may now be sought in vain. We will abridge this too lengthy history: those who believe that our planet is destined to perish by water will find in the tragic annals of Holland a foretaste of their sinister prophecies. There man has felt from century to century the ground disappearing beneath his feet; he has seen the ocean mount above the most flourishing districts, and sweep over them like the wave that levels the sand.

Latin authors make no mention of the enormous gulfs by which the sea now advances so deep into the Netherlands. Several narratives, on the contrary, indicate that Friesland then formed one continent with Holland. A map of 1584 exists, in which the author, Abraham Ortelius, re-constitutes, on the testimony of historians, the old configuration of the country before the formation of the Zuyderzee. Here extended an immense region, intersected by different interior lakes, the

most considerable being Lake Flevo (Vlieland), to which Tacitus alludes. This lake was formed, according to Pomponius Mela, by the overflow of the Rhine, and was traversed by a river of the same name (Flevum), which poured itself into the sea. One day, the ocean leapt forward, burst over an isthmus, and entered Lake Flevo: reinforced by this ally, the enemy speedily advanced into the interior of the country. The successive invasions by which a great portion of the territory was transformed into a bay began and ended in the thirteenth century. Authentic documents, reports written by the inhabitants of the adjacent country, contemporary witnesses of the disaster, leave no doubt as to the recent formation of the Zuyderzee. An immense extent of low land was buried by the repeated movements of the sea.

In 1205, the island now called Wieringen, to the south of the Texel, still formed part of the mainland; it was detached from it by several deluges, the dates of which are known, and in 1251 the separation was concluded. Encouraged by its first successes, the sea hurled itself on a rich and populous isthmus, which extended to the north of Lake Flevo, between Stavoren in Friesland and Midenblik in Holland: about 1282, all this region was annihilated. It is impossible to look at the coasts of the Zuyderzee, so beautiful in summer, and at times so calm, and not think of the catas-

trophes that formed this sea, and the flourishing cities which have found their tomb in its waves.

These natural revolutions have exercised an influence on the political history of the Netherlands. The destiny of the towns which are now on the shores of the gulf has been modified through the changes that have occurred in the geography of the country. The importance of Enkhuizen, Midenblik and Hoorn, old metropoles of Friesland at the time when the space now occupied by the Zuyderzee still formed part of the continent, has gradually decreased since the formation of the bay. It is owing to this decline and the causes which produced it, that Amsterdam stands forth now one of the principal cities in the world, and one of the ports most frequented by vessels.

Travellers who go to Amsterdam too often neglect to pay a visit to Marken, Urk, and Shokland ; for these three islands in the Zuyderzee are the last vestiges of a sunken continent. Every man who desires to study peoples and countries should undertake this trip, which is at the same time a course of history. The inhabitants of these three isles, separated from the mainland, as it were, dismembered one after the other by the terrible inundations, have remained on the various steps of the moral ladder where the cataclysm seized them. Sailing on the Zuyderzee with this object is returning into the past. What was our

astonishment at seeing these relics of ancient races emerging from the abyss of waters and the ocean of ages, with the manners, language, traditions, customs, and faces of another time! It was to us like an apparition of ancient society. The Batavians and primitive Frisons are not dead: you find them again there. In these isles, the last traces of a continent, and on the adjoining coasts of the Zuyderzee, you are surprised to meet with a strange collection of peculiar features, physical characters, and above all, customs which are not found elsewhere save among several different nations. These living medals attest the origin of ancient races which have preserved their mode of life, their habitual employment, their fashions, and distinct physiognomy. You have, as it were, before you, not only the material proof of the ancient deluges which have everywhere left memorials of destruction, but also fossils of a new order, which display in a living shape the successive formations of history.

As you retire from the shores of the Zuyderzee, that is to say, from the scene of the old catastrophe, you find that these strikingly original characters disappear to a great extent, among the inhabitants of the interior of the country. The types are effaced so soon as the geographical communications are re-established. The shipwreck of one part of the continent has, therefore,

isolated certain portions of the population of the Netherlands, and by detaching them from the mainland, has, so to speak, petrified them in the ancient but diverse forms of civilisation.

The tempestuous formation of the Zuyderzee appears to have been the consequence of still more ancient disasters. All along Northern Holland you find a series of isles scattered over the ocean, like the pearls of a necklace of which the string is broken. These isles are the last relics of a coast which formerly served as a rampart to the Netherlands; this rampart was burst, and the fragments were dispersed over the German Ocean. The number of these isles has diminished by about one-third since the time of Pliny, for that naturalist counted twenty-three between the Texel and the Eyder, while now we only find sixteen of them. And these isles again are only the ruins of a ruin. In the year 800, Heligoland, situated at the embouchure of the Elbe, began to be gnawed by the waves; in 1300, 1500, and 1649, other portions of land were destroyed, until the moment when only one relic of the isle remained standing. A rock of red marl, about 200 feet in height, towers above the disaster, like one of those great oaks which survive a ruined forest.

To be just to the ocean, we must place in opposition to this gloomy list of cities destroyed, villages lost, and entire districts carried away,

the more consolatory picture of the restitutions made by the sea. The great destructions of land are generally succeeded by a reaction on a certain scale. Between Antwerp and Nieuport extends a low country, which in the time of the Romans consisted of wood, marsh, and peat-beds, and was protected from the ocean by a chain of dunes; this chain yielded, in about the fifteenth century, to the fury of the tempests. Instead of the sea it became through the irruption of the waters, this country is now a continent, and supports a numerous population. It is true that this change is owing, partly at any rate, to the industry and courage of the inhabitants, who have profited by the sand-banks deposited by the sea to regain, as it were inch by inch, the soil which the sea tore from them. The same fact is reproduced in the Biesbosch; there, too, the water has restored a portion of the land it stole. Numerous plains, already bearing abundant corn crops, have forgotten that the spot was once sea. The sight of these ancient lands submerged by the dead waves, and now springing into life again, is one of the spectacles best adapted to unveil the progress of nature, who ever creates by destroying. The raging overflowing water deposits with time on the scene of the inundation the counterpoise of its conquests and violence. By the natural movement of things, from century to century sandbanks

form, which grow covered by a fertile mud; hence the earth, though invaded, conquered and swallowed up, rises again in the end, and strengthens itself as it were through its defeats.

The formation of Holland, interesting from a geographical and historical point of view, is no less so from that of philosophic geology. Scientific men have more than once asked whether the laws in activity upon the globe, during the embryonic age of our planet, differed greatly from those which determine the present economy of nature? The answer to this question is perhaps to be found in the physical history, or if we may use the term, in the genesis of Holland. There are not two systems in nature, there are not a living and a dead geology; wherever the Neptunian causes have acted in the most remote ages, they must have done so in the same way as they have behaved on the soil of the Netherlands within historic times. The duel between the earth and sea, which plays so great a part in the ancient cosmogonies, is prolonged here, and produces the same consequences—deluges, catastrophes, and changes in the shape of the delta. The ocean withdraws from some coasts to occupy others, at times surrendering what it has seized, seizing again what it has let go, but the law of these movements is not yet properly known. From this point of view, the geographical history of Holland is, partially at

least, the secret of creation revealed. The combined events to which the soil of the Netherlands owes its birth, and the variations it has undergone, place us, in fact, on the track of the events which have several times modified, and may still modify, the physical constitution of our globe.

A few recent facts prove that the ocean has not resigned its claims on Holland. On July 4, 1825, the sea rose, and the waters ran into Over Yssel, Friesland, North Brabant, and Gelderland. This gigantic inundation was, it is true, but of short duration; it retired with the ebb, but leaving behind it a feeling of the danger of the Netherlands. At the sight of this country, menaced by the overflow of the rivers, shaken by the winds, and against which the tides hurl all their weight, we might have reason to fear for the soil of Holland, for her wealth and her very existence, if an agent of a new order did not interpose in the contest, a moral force which offers a counterpoise to the blind powers of destruction. This force exists: hitherto we have seen the labour of nature, and it remains for us to speak of the changes introduced into the geographical form of the Netherlands by the hand of man.

## CHAPTER III.

HYDRAULIC WORKS—THE WATERSTAAT—COUNTS OF THE DYKES —ROMAN CANALS—KATWYK—THE DUNES—THE AMSTERDAM LEVEL—POLDERS—THE ENGINEERS' SCHOOL—SIR W. TEMPLE—THE HAARLEMMER-MEER—DRAINAGE WORKS—THE LEEGH WATER—A DUTCH ROBINSON CRUSOE—THE ZUYDERZEE—A GIGANTIC PROJECT—FUTURE PROSPECTS OF HOLLAND.

WHEN the first inhabitants arrived on the soil of the Netherlands, what did they find? A marsh. Fortunately these ancient pioneers were Batavians and Frisons; the former belonged to the Saxon race, a race patient and powerful, born for the conquest of the soil; while the Frisons, whose origin is not thoroughly known, were a branch of the Germanic or Saxon family. They came in the train of the ice and erratic boulders; for the deluges of man follow the path traced by nature in the great outbursts of the elements. These barbarians wanted a country, and vowed to give themselves one. It was a world to form; they must begin as in the ancient cosmogonies, by separating the earth from the face of the waters.

This *fiat lux* of human power, this second Creation in which industry constantly shows itself the rival of deity, this triumph of intelligence over matter and chaos, was not the work of a day. Man does not create by a word; he creates, as nature does, by the help of time and the successive development of his strength. The cradle of the Netherlands consisted of a few sterile, shifting spots of ground, the possession of which the overflowing rivers and high tides disputed with each other.

The genius of the Netherlands has grown in an incessant struggle with the elements. This country, inhabited by a numerous and flourishing population, is entirely artificial. Were it not for the Dutch, Holland would not exist. This country is their work, their creation, and they have a right to say, in the words of the Bible, *et vidit quod esset bonum.* Were it not for art, such a region would never have seen light. Were it not for the incessant vigilance of its inhabitants, it would speedily be lost. Its birth is a miracle of human genius, its preservation a prodigy. We are about to study the conditions among which this annex of the continent was strengthened: we will seek the technical processes, by the help of which the industry of the inhabitants has repulsed the waters, built cities in shifting sands which the sea claimed and still claims, enchained the course of rivers, introduced agriculture in the low and

inundated lands—in a word, converted primitive Holland, which was less a soil than a confused medley of earth and water, into one of the most pleasing countries on the face of the globe.

The hydraulic history of the Netherlands may be divided into three periods: the dyke works, undertaken against the sea and rivers; the creation of polders; and the employment of machines to dry the internal lakes.

The first inhabitants encamped on hillocks and mounds themselves raised. This position was necessarily molested by the peculiar state of the rivers, which were a species of vagabond torrents inconstant to their bed, and at each movement ravaged the timid essays of cultivation. It was requisite that art should give banks to the streams, and the waters learn to flow regularly to the sea. The first date of dyking the country cannot be established, but it is believed that the Cimbri formed dykes, which were destroyed but afterwards restored on the same foundations. These artificial banks protected the growing cultivation; without them, Holland would have remained what it originally was, an uninhabitable land. A tradition has it, that the first dyke in Southern Holland was formed against the Rhine in the low lands in the vicinity of Leyden. This system spread, and similar works were employed to prevent the irruptions of the Meuse. Historians are not agreed as

to the origin of these works, some attributing them to the lords, others to the people. The nobility had formerly a share in the establishment of dykes, but it would be an error to suppose that the castles were the starting point of the hydraulic system, for many towers which command the course of rivers and streams are, on the contrary, of a much more recent date than the embankments. These ramparts of earth were at first constructed district-wise: the proprietors of the soil clubbed, and formed a species of nautical insurance to protect themselves against the overflow of the waters. The hydraulic districts were more or less extensive, more or less constituted in accordance with the defensive requirements. Not only were the feudal nobility strangers to the movement, but the administration of the waters (Waterstaat) gave birth to a new nobility of thoroughly plebeian origin. The Counts of the Dykes, as the inspectors intrusted with watching the streams were called, enjoyed very extensive powers, which, at periods of a crisis, surpassed even the authority of the Counts properly so called.

Everywhere nobility was originally grafted on the conditions of conquest, and as in Holland the enemy was the ground, those functions which produced the victory of man over the elements were from the earliest period honoured. Before the Christian era, Drusus had a canal dug to join

the Yssel with a branch of the Rhine; half a century later, the Romans connected another branch of the Rhine with the Leck, which at that period was but a small stream; and lastly, in our time, gigantic works have united the same river to the North Sea. It would be too long a task to recall the other conquests gained over the rivers of Holland, those dangerous friends of the country. The Bible represents to us the genius of Babylon sitting haughtily on the quays of the city, and saying "'Twas I who made the Euphrates!" At the sight of the magnificent canals which connect the wandering arms of rivers, at the sight of these famous dykes which restrain, like the lips of a cup, the waters ever ready to overflow, the genius of Holland can say with even more truth, "'Twas I that made the Rhine and the Meuse." Nature only gave the Netherlands uncertain and ravaging watercourses, which the national industry has converted into rivers.

The processes of embankment vary with the obstacles that have to be surmounted. At one spot the dykes are simple earth walls; elsewhere the uneven or shifting soil is covered with a layer of fascines, while in some instances it is necessary to support these ramparts with brickwork. In spite of these great labours, well adapted to give a grand idea of the people that made them, the state of the Dutch rivers leaves much to desire. A committee

nominated by William I. published in 1827 a voluminous report on the best means to drain the waters off. The majority of the plans for improving the rivers still figure merely on paper; the difficulties of execution, joined to the embarrassed state of the finances, caused them to be deferred for an indefinite period. On the other hand, a perfectly opposite opinion has been put forth during the last few years. From the circumstance that dyking is not always effective against the overflow of the waters, some writers have concluded that it was wrong to embank the rivers. This paradox was supported by Bilderdyk, one of the best poets of Holland.

The principal charge on which reliance is placed to attack the interference of art in the ways of nature is derived from the present state of the waterworks. The bed of the Dutch rivers is rising insensibly but perpetually: the dykes must rise in the same ratio, but in doing so become weaker. Relying on the danger the situation of the waters suspends over the country, it has been asked whether it would not have been better to abandon the rivers to all their caprices. These rivers, it is argued, would have traced their own road through the alluvial lands, and Holland would now run less risk of being carried away. These poetic visions are referable to Jean Jacques Rousseau's system —the optimism of a state of nature. Without

the dykes the rivers would not have been kept within their bed, agriculture would not have obtained the rank it holds in Holland, and the elements of the social condition would never have been disengaged from the confusion of barbarism. Art must support nature: if, owing to the resistance offered to brute force and the destroying elements, nature protests, if she even avenge herself by threats for the constraint imposed on her, it is for human industry to discover in its ever increasing resources fresh weapons to combat the danger. In spite of the elevation of the dykes, which, it is true, attain at some points a considerable height, the ruptures and inundations are now less frequent in Holland than during the last century. Those rivers which run above the adjacent lands let themselves be held better than formerly within their artificial banks. It is curious when journeying in a boat or steamer to look down on the fields, which seem as it were framed in, and to follow along the bulwarks raised by man's hand, the course of these angry but enchained waters.

The education of rivers, if we may be permitted to employ the image, would have been as nothing without another system of embankment and protection against the sea. The ocean, that great destroying force, limits itself by its dunes; but human industry has been obliged to support and fortify the girdle of sand behind which the Netherlands are

sheltered. The first time you see these hillocks, which are either naked or covered by a withered vegetation, you are struck by the serious character they impart to the Dutch coast. The inhabitants distinguish three classes of dunes: the external dunes or those which touch the sea, the central dunes which are the highest and widest, and the inner dunes which are believed to be the most ancient. This triple natural defence, whose formation geologists attribute to the combined action of the waves and the winds, might seem to determine the date of the origin of the coast, if the ratio in which the sand advances inland did not vary, and thus render this chronometer very doubtful.

As the country is generally flat, these dunes form relative chains of mountains. These advanced works, which seem, as it were, a bulwark against the waters and a shelter from the tempest, require constant repairs. The Dutch cover these dunes with a species of bulrush or reed, which is known by the name of *Arundo arenosa*, or Sand Reed. It is planted in spring or autumn, and protected from dangerous winds by straw. When this weed has taken root, it unites and consolidates the shifting mass of sand: it is the vegetable cement of the Dutch coast. The dunes have, in addition to the wind, a very serious enemy in the rabbit. This indefatigable miner craftily attacks the dry soil, which stands like a padding between the sea and

the interior of the country. Hence a constant surveillance is requisite to repair the damage committed by this feeble animal. On all those points of the littoral where these natural dykes did not exist, they have been created; sometimes even it has been necessary to strengthen them with wood, stone, or rubble. The sight of these works gives a lofty idea of human power; it is difficult to imagine how much perseverance, courage, and sagacity the Dutch have displayed in this combined system of artificial and natural defences, which now forms Holland's buckler against the sea.

In order to understand the extent and nature of the dangers to which the Netherlands are daily exposed, we must describe what the Dutch engineers call the water-scale. We have already seen that a large portion of the Netherlands is situated much below the level of the sea and the rivers. To estimate these differences of position, art has traced an imaginary line, which is called the Amsterdam level. This stands to the other degrees of the hydraulic scale as the zero of the thermometer does to the different degrees of temperature. Starting from this basis, it has been found possible to form an idea of the relative position of land and water to each other in the Kingdom of the Netherlands. The results of these calculations, we are bound to state, are anything but reassuring. During bad weather, or, to speak the local language, during

the north-west tempest, the tide rises near Katwyk 11 feet above the Amsterdam level; the tide of the Meuse, near Rotterdam, 10 feet 6 inches, and that of the Leck, near Vianen, 17 feet. We can see from this what would become of a country placed under such conditions, were the hand of man withdrawn.

Industry has drawn Holland out of nothingness; and it is industry that preserves it. The system of sluices is combined with that of the dykes, as a means of defence against the waters. It has been said that the Dutch have no architecture. Some civil or religious buildings protest against this opinion, which is far too exclusive; but it must be always borne in mind that the building art is moulded on the nature and necessities of a country. Now, in Holland, the truly national architecture is the hydraulic architecture, which has produced immense and colossal constructions. The first sluices were of wood: at the present time they are monuments of stone, and the most magnificent works that can be seen. The peculiarity of this art is not elegance, but strength. To form an idea of the style of such works, you must visit the great Amsterdam sluices, and especially the buildings at Katwyk. This fortress, raised against the sea, has truly a stern and imposing character. Three sluices succeed each other at the mouth of the Rhine, in the canal intended to support the failing strength of the river, and protect Holland on this side. On tem-

pestuous days, it is considered prudent to make concessions to the sea. The sluice gates nearest the mouth of the river allow a passage to the waves, which dash madly at the second gate and are broken against it. These masses of stone, which defy the ocean; these powerful machines directed by art founded on experience; these gates which open and shut according to the current and bent of the waters and the direction of the wind—all these reveal the existence of an admirable and complicated system; all announce a species of administrative providence that watches over Holland.

The dykes, sluice-gates, and all the great defensive works erected against the "external waters," as the rivers and the sea are called here, would not have sufficed to render Holland habitable, if the country had not also discovered the art of getting rid of the "internal waters." In consequence of rains and overflow of the rivers from time immemorial, pools, lagoons, and perpetual marshes were formed, extending a long distance inland, and everywhere defying cultivation. Another cause for the presence of water was the extraction of peat. Owing to the want of wood, the inhabitants were constrained to ransack the earth in order to warm themselves, and the exhausted peat-beds were soon converted into lakes. Holland presented then the singular spectacle of a people incessantly menaced by inundations, yet incessantly occupied in pro-

ducing water. It is against such a state of things and such dangers that the hydraulic art was summoned to react by the creation of polders. This name, derived from a Dutch word signifying inclosed lands, was given to the ancient marshes, which the first inhabitants surrounded by weak dykes and supplied with clumsy sluices. The system of polders became developed with the progress of agriculture and industry. In the infancy of the hydraulic art, the employment of machinery was unknown, and it was not till a later date that one of the enemies of Holland, the wind, was put under contribution to dry the land. It is impossible to say who built the first mills destined to draw the water off the polders, but a tradition leads to the belief that this system was practised in Holland toward the beginning of the 15th century. It is said that in 1408, there lived at Alkmaar in Northern Holland a certain Florent Alkmade, who put up an hydraulic wind-mill. This mill served as a model for many other machines of the same nature, and the invention speedily spread to even remote districts.

At the outset these mills were small and incomplete; they would only act with the wind blowing from one quarter, the north-west, but gradually they increased in power. At the close of the 15th century, the employment of mills in the Dutch polders had become general. From this period

date the regular dyking of the low lands, the formation of trenches to discharge and guide the water, the construction of sluice-gates to establish the level between the reservoirs: in a word, a tolerably scientific system of desiccation. Through this discovery the internal state of the country was changed, and agriculture could spring up. At the present day mills of all shapes and dimensions stand in the middle of rich plains, whose superfluous waters they draw off: their busy wings are in the distance blended together in a tranquil sky, and give the landscape a singular character. Some of these mills are true edifices, which seek the wind at a considerable height; others, smaller and built of wood or brick, are very prettily finished off. This rustic coquetry; these huge sails which flutter in the air like the wings of gigantic and fabulous birds; this *tic-tac* blended with the rustling sound of the waters, spread over the calm nature of Holland an undefinable charm and movement. Elsewhere mills, those monuments of a pastoral life, are only employed in one way; but here, on the contrary, they are hydraulic machines, saw and flour grinding-mills. You see some polders served by a single small mill, while several large mills are employed in draining others. Formerly, efforts were limited to draining ground at no great depth; but since science has progressed, the wind is called upon to exhaust even deep marshes. The

polders have given Holland a second nature; this country, agriculturally regarded, is placed under most peculiar conditions. Elsewhere, it is necessary to create the produce of the soil, but here the soil itself must be created. When you now see this land, fabricated and kept up by the hand of man, covered in summer with rich pasturage, fruit and vegetables, and frequently abundant crops, you cannot sufficiently admire the conditions of the art which have converted land buried beneath the waters into a garden.

One of the difficulties consisted in maintaining the balance between the private interests of the polders and the general interests of the hydraulic system, to which Holland owes her existence. All this could only be regulated by an administration possessing precise and delicate knowledge. When we reflect that the sea is for Holland an indefatigable enemy, and think of the net-work of dykes, ramparts, and canals which are connected together, and all forming links of a system; when we calculate the terrible consequences of the slightest neglect in a country where a mole or rat-hole may imperil the safety of a dyke, and open a passage for the water, we are no longer surprised that from the earliest age the functions of the Waterstaat have been considered most important. These offices were conferred by the States-General, and exclusively on men of the reformed faith. At

Delft there is still a special school, in which pupils are educated in hydraulic engineering. This body of civil engineers is the real army which watches over the defence of the country. It is almost impossible to form an idea how scientifically the sluice-gates must be worked not to open the gates to the enemy, or what practical and minute art must preside over the harmony of the waters throughout the interior of the country. It is our conviction that the Dutch alone are capable of this continual and methodical surveillance, without which their country might disappear at any moment beneath the sea. It is owing to their perseverance, the skill of the engineers, and the enormous outlay contributed to by all the citizens, that Holland strives against the waves, and still floats on the surface. *Luctor et emergo!*

The success obtained in drying the polders, some of which are twelve to fifteen feet below the natural surface, necessarily inspired man with great confidence in his resources. It was, in fact, a premium of encouragement to undertake even more daring works. In the 17th century considerable stretches of land were, so to speak, dragged from the bosom of the waters. The first drainage on a great scale took place in North Holland, in 1614. Lakes formed by nature, especially the Beemster, Purmer, and Shermer, were changed by the hand of industry into one of the

finest and richest estates in the Netherlands.* An observer of that day, William Temple, tells us of his surprise and admiration on seeing an old lake two leagues in diameter (the Beemster) on which cattle were grazing. This ground divided by canals, traversed by regular roads, and bordered by avenues of trees, formed, even in his day, the prettiest landscape imaginable. From 1608 to 1640, twenty-six lakes were thus transformed into polders in the same province. In 1820, there were more than 15,000 acres of drained land in North Holland, while, in the south, the quantity of land restored to agriculture amounted, in 1844, to 72,500 acres. Since then the waters have been drawn off the Nootdorp polder, which was a marsh, and on its site a little village has been built.

Holland, to which nature seems to have denied

* A local chronicle states that the drainage in North Holland was effected by a private individual, a sailor or fisherman. He had seen the great fleet sent by Philip II. against Holland and England: he had also witnessed the disasters of that fleet, which lost its vessels on every coast, and specially remembered a fine vessel laden with iron and gold which he had seen sunk. Having heard allusions made to the considerable expense the drainage of the Purmer would entail, he made up his mind to recover from the sea the wealth it had swallowed up in his presence. He proceeded with this purpose to the coast of Ireland, made several mysterious voyages, and at length by skilful manœuvres, discovered the submarine California. It was with the gold obtained from the chest of the Spanish vessel that, according to tradition, the lake was converted into dry land.

all the elements, has managed, in the words of Dante, to gain by labour what nature had refused her. This history of land summoned from the bottom of the water, and replying to man, "Here I am," would seem a marvellous history, if the means by which this miracle of industry was effected were not known. These means are moreover very simple. Hitherto all the drainage has been accomplished by the toil of windmills; and it was only at a recent date that the more powerful agents, to which we have now to refer, were set to work.

In spite of so many victories gained over the external enemy, a dangerous and restless guest disturbed the peace of Holland: we mean Haarlem Lake. This lake the Dutch saw created. The history of its formation should be studied in the old maps, where the development of this mass of water, which ended by intimidating Leyden and Amsterdam, can be followed step by step. In 1531, there existed near Haarlem four insignificant lakes, on whose banks three villages flourished, whose names alone have been preserved. In 1591, one of these villages had already disappeared; in 1647, it was all over with the other two. The lakes were at first separated; in 1531 there only existed between the Haarlem and Leyden lakes an opening, so narrow that, according to an old chronicle, it could be crossed on a plank; and

in 1647, the four lakes were united, and their several names blended into that of the Haarlem lake. Only one point of land, Beinsdorp, still remained above water; but in 1687 it had diminished, and the Meer was still increasing. It had gradually attained a circumference of eleven leagues. It was a sea, and a stormy one too. On this Meer naval actions were fought; fleets of seventy flat boats manœuvred, and several vessels perished. We saw at Haarlem, in the natural history collection of Dr. Van Breda, two specimens of the *Silurus glanis* caught in this lake, and which are the largest of all fresh-water fish. In turn calm or violent, this lake seemed to obey special laws of its own. On November 1, 1755, it was afflicted at the moment of the famous Lisbon earthquake. Crossing its waters was perilous, and shipwrecks frequently took place. Like those animals which become more savage with age, the Haarlem Meer daily displayed a more wild character. At each heavy storm mountains of waters were seen to rise in this inland sea, and dash violently against the defensive works, over which they hurled clouds of spray. It proved therefore a dangerous and troublesome neighbour. If the works by which it was restrained had given way, the lake would have rushed into old inundated peat-beds, and recruited fresh strength there to immerse all Holland. On the other hand, as much

money was expended in checking its encroachments and driving it back into its bed, as would be required to drain it. In the meanwhile, Haarlem Lake remained in existence until, on November 9, 1836, the waters, impelled by a furious westerly wind, dashed over the dykes and roads, and reached the very gates of Amsterdam. This event decided the fate of the Haarlemmer Meer; the lake had threatened Amsterdam, and Amsterdam said to the lake, "You shall disappear."

From that day, in fact, its sentence was pronounced; and the only point was to find the means for carrying it into effect. The drainage of Haarlem lake had been several times proposed, and various systems had been brought to public notice. In 1643 an engineer and mill-maker in North Holland, John Adrian Leegh Water, seeing the peril that menaced Holland, if the Haarlemmer Meer continued to exist, published at Amsterdam a small work, the conclusion of which was, "We must get rid of this ruinous and invading mass of water. *Ergo, delendum est mare!*" To this work ("Haarlemmer Meer Boek") were added a plan of desiccation, and a map. The author of the project required 140 mills to pour the lake water into the sea. This project met with more than one objection; it would have been necessary for the wind to blow strongly and long in the same direction for the mills to work properly. Many other systems

were produced ; but to extract this powerful mass of water a considerable force was needed, independent of the variations of the atmosphere, and solely and entirely submitted to the will of man. These embryonic plans were, as regarded the means of execution, only Utopian ; a discovery was wanting which would remove all obstacles, and render the most daring designs of human genius practicable. That discovery was the power of steam. Such a mighty invention utterly changed, in fact, the conditions of this difficult and hitherto daring work. In April, 1840, a commission set out from Holland for England, with orders to make inquiries about steam and pumping machinery. It is well known what advantage England has derived from this new motive power, to what depth it has descended to draw the water from its mines, and by the help of what powerful pumps it has brought that water to the surface ; but nothing that had hitherto been done or practised was applicable to the Haarlemmer Meer : an entirely new system of machinery was needed. After a few experiments, the principal organs of the new apparatus were formed. It was less a machine than a colossal and animated being ; the name of Leegh Water was given it, in memory of the man who had first ventured to counsel the drainage of this sea.

The Leegh began removing the water by itself

on June 7, 1847. Two other machines came to its aid, one on June 7, 1848, the other in the commencement of April, 1849. At the present day the drainage is an accomplished fact. When we recently visited the lake of Haarlem, that terrible inner sea no longer existed. The Leegh Water was still at work, but it was engaged in drawing off the surplus water of a small basin, the feeble and final vestige of what had once been the Haarlemmer Meer. The building that contains the machine is a round tower, built in the centre of the old lake, upon a forest of piles. The constructions of modern industry sometimes resemble those of feudalism; for in both art proposes to itself to instal material force. There is this difference, however, that the power of destruction resided in the old towers, whilst this colossal bastion, standing in the midst of the vanquished waters, represents here the power of utility. A square building is attached to this tower, in which the boilers are placed. We were permitted to inspect the interior of the Leegh Water, some portions of which are of dimensions before unknown in the world of mechanics. The Leegh Water seems to be alive, such intelligent economy presides over its every movement. Eleven pumps, vast and powerful suckers, fixed on the sides of the tower, give it the appearance of a gigantic polypus engaged in drinking up the waters of the lake.

We had visited the Meer more especially for the purpose of examining the bottom of the lake, left bare by the labour of the machines. This land, recently dried, and, as it were, amazed at seeing daylight; these scarcely defined roads, on which you walk to-day, and over which you sailed yesterday; these birds singing where fish swam —all this produces a unique and serious sight. Talking of birds, we saw as we went along several flocks of aquatic species, which had returned with the spring, and seemed quite surprised at not finding again the familiar lake. The poor creatures asked themselves whether they had lost their heads, or if it were nature that had gone mad. It was neither one nor the other; man had passed that way, and beneath his breath seas dry up now-a-days. Forty-five thousand acres of recovered land have been sold at a good price. The soil shows itself again sorrowful and naked, just as the soil of Europe would reappear after three centuries, if it had been covered by a universal deluge. Civilisation recommences in the desert, and recommences with labour. We met a Robinson Crusoe, who was busy building a cabin of earth, while other temporary huts of planks or even of straw announced the return of pastoral life to these spots which were forming the domain of man, and whence he had withdrawn. As for the old swallowed-up villages, not a trace of them has

been found; but, at any rate they are avenged; their enemy no longer exists. Persons expected to find at the bottom of the drained lake coins, medals, works of art, and the relics of the vessels shipwrecked there. Hitherto little has been found; but agriculture, in turning up the soil, will probably bring up something better. A more certain treasure, however, than gold and silver buried in the ground is that to which the fabulist alludes: "Work and take trouble." Attempts at cultivation have been made on the site of the old lake, and have succeeded beyond all calculation. In 1854 colza was sown, with which a beginning is always made in the drained polders; the first crop was magnificent, and the next quite as good. When we visited the lake the ground was all yellow with flowers, and some speculators had introduced bees to plunder this golden crop. Hitherto habitations had been erected without order, and some children accidentally came to light in these brick or wooden hovels, whose parish it was a difficult matter to decide. The law had not foreseen that persons would be born at this spot. At the present day boundary lines have been traced, villages and churches have risen, and canals, roads, and avenues of trees diversify the face of the monotonous plain. A new world has sprung into existence. A few years hence, the children whose country, six years ago, did not

exist on any map, will be the inhabitants of a fertile district, probably themselves owners of a farm to which the kine will return at nightfall with distended udders.

Steam is destined to introduce a revolution into Holland. Though the wind will always be preferred as an economic motive power for draining small polders, mills will henceforth give way to engines in all great works of art. Already several extensive projects are under consideration. There is another lake like that of Haarlem, the Legmeer, which has a superficies of 6000 acres, and which it is proposed to turn into a prairie. In order to open the works a sum of 60,000*l.* to 70,000*l.* was needed, and that could be easily found.

A more gigantic idea still, which might almost be called startling in its audacity, has sprung into life recently, and that is the drainage of the Zuyderzee. Some persons consider the prospect chimerical and extravagant, but after the latest conquests of industry—after the discovery of steam—and before all, after the drainage of the Haarlemmermeer, nothing is impossible. We must bear in mind that the views of Leegh Water, the mill builder, at first met with the same feeling of doubt, if not of malevolence and incredulity. A very serious difference certainly exists between the two undertakings; as the Haarlem lake was embanked, the works had to deal with an imprisoned and

limited mass of water, while as the Zuyderzee communicates with the North Sea by a wide opening, in this case infinity would be attacked. Before draining the Zuyderzee it would be necessary to embank it, and hence it is the intention of the engineers who meditate this grand scheme to raise a brick wall through the waters of the gulf, which would isolate them from the Ocean. The creation of such a polder, and the necessity of turning rivers which now fall into the gulf, present enormous difficulties; still we do not believe them to be insurmountable. If the Dutch are cold and slow in conception, they never recoil before any obstacle when the day for execution has arrived. Drainage works possess a supreme interest for them, as the safety of the country is the reward of the zeal the inhabitants display in such sacrifices. Water summons water, the lakes call the sea; through these parasite lakes the ocean has already one foot in the country. Draining basins like the Haarlemmermeer is driving the enemy out of the interior of the country, and to a certain extent repulsing the invasion. Another and perfectly political consideration makes the drainage system one of life or death for Holland. This recovery of lands which the waters tore from them is to the Dutch the equivalent of military conquests. A country crowded with inhabitants, and which wants space, gives itself all that nature has refused it, when it takes

advantage of its industry to raise itself to the rank of the first powers of the second class. The giant race of the Batavians has carried to the ends of the world the conquests of war, navigation, and trade, but the modern Dutch have no longer a necessity to cast new colonies on distant coasts to extend their territory, for they have sufficient at home. This industrious and honourable people, whose ancestors were the terror of the seas, will henceforth find in the draining machines the resources it once demanded from brilliant exploits. A Dutch geographer, two centuries ago, gave his countrymen the counsel to enlarge their territory without extending its limits :

> "Quis furor, oh Batavi, peregrinas quærere terras ?
> Ecce alio terram littore quæris :—habes."

We have seen what was the cradle of the Netherlands when Dutch industry transformed a marshy district into one of the most agreeable countries of the globe. To whom shall the land belong—to the sea or the river ? Man interfered in Holland, and the conditions of the struggle were changed. In spite of all the advantages gained by industry, some geologists, however, are not reassured as to the definite results of that victory. Holland, they say, is conquered from the sea, but it is a conquest the sea will take back sooner or later. This opinion is based on certain facts and

contradicted by others. If we regard the ordinary and logical course of events we are more inclined to confidence than alarm. The forces of nature do not increase, while the re-agent means man has at his disposal on the earth, and particularly in Holland, to resist the elements are daily augmented by steam, the progress of the mechanical arts, and the discoveries of science. Hence the victory is not doubtful. Only one geological fact might throw out all these calculations and prove the pessimists in the right; it is, if we may believe M. Elie de Beaumont, that the soil of Holland has undergone a slow and continued depression. Researches undertaken at Amsterdam, Rotterdam, and on the shores of the Zuyderzee indicate, it is true, that the land has sunk at several points below its old level, and such facts have led to the total submersion of Holland being foreboded within a given time. But we must not be too eager to accept this conclusion. In the first place, the changes of nature are not accomplished with that light rapidity which characterises the works of man and political revolutions. All the civilised nations of Europe would probably have the time to live and disappear before the sacrifice of Holland, that interesting portion of the present continent, is consummated.

We are inclined to believe, moreover, that in the contrary event, that of nature declaring an

active war against the Netherlands, the human genius would grow greater through the very extent of the danger. Nothing proves that the Atlantis might not have been saved, if the inhabitants of that more or less fabulous island had had at their disposal the mechanical resources of modern civilisation. On the other hand, Holland would have long ago shared the fate of the Atlantis, and would only figure in the narrative of historians, had it not been for the skill of her engineers, the gigantic works and admirable ramparts behind which the country has fortified itself against the waves. If the soil sink, human genius rises and the struggle continues. Holland may be compared to a threatened ship which would take in water at all its seams were it not for the persistent manœuvres and unwearied attention of the experienced pilots who direct it. Supported by such hands she has kept herself during the historic ages, and will doubtless keep herself for a long time yet, at a high degree of maritime power, commercial greatness, and prosperity.

## CHAPTER IV.

THE FIRST SETTLERS IN HOLLAND—THE ORIGIN OF COMMERCE—MARITIME POWER OF HOLLAND—AMSTERDAM—THE CITY BUILT ON PILES—ROTTERDAM—THE HAGUE—SIMPLICITY OF THE DUTCH—PHLEGM—VAN SPEYK—IDEALITY AND REALISM—FRIESLAND FARMS—SIR W. TEMPLE'S VERDICT ON HOLLAND.

NATIONS are like women: to know them you must love them. Unfortunately the northern races excite but little sympathy in the southern. The Frenchman when he leaves his home is the greatest of all strangers, and he has a special difficulty in identifying himself with the life of the northern peoples, their languages bristling with consonants, their sagely affable manners, their minute and correct gravity. The nature of the Netherlands, though rich in beauty, does not respond to his ideal. The pretty country villas which border the roads or canals, this perpetual garden, the clumps of trees arranged for the pleasure of the eye are very charming, but it all appears to him cold. He fancies as if the very birds are forbidden to sing. Most of the travellers

who have written about Holland have done so with some little temper; they were angry with the Netherlands for not being France or Italy. This annoyance is most unjust; the very thing that constitutes the value of the group called European civilisation, is the contrast of character and diversity of features. You must see the Dutchman at home, and compare his manners with the canals, dunes, polders—in a word, with the external scenery. Here the nationality adheres to the soil as the soul to the body. In the portraits, more or less overcoloured, which have been drawn of the Dutch, only one thing after all is wanting—the likeness: the artists have forgotten to compare the inhabitants with their country.

The Netherlands, that country of such a singular conformation, has given rise to a national character which is unique. Very different from their neighbours the Belgians, in whom every originality of race is effaced, the Dutch resemble nothing in this world but the Dutch. Now, those peoples which have a marked physiognomy, lend themselves, like individuals, more than others to caricature. By taking into account only the external features of nationality and enlarging them, it is easy, with a little art, to raise a laugh at the expense of the Netherlanders. Still, the man who should seek there the true character of the Netherlands would fall into a strange

error: this character, though simple and naïf, is, however, composed of a multitude of delicate shades, which are very difficult to be detected and even more difficult to be pointed out. To do so we must go back to the causes under the influences of which what may be justly called the Dutch type was formed, and these causes, though extremely diverse, may be all referred to a single one—the peculiarities of the soil. Nature has been here the nucleus of civilisation.

A great thinker introduced into natural history the principle, "As the organ is, so is the function." We might say similarly: as is the physical constitution of a race, so are its institutions, its dominant faculties, laws, traditions, and history; so, in a word, is its genius. This constitution of races, the principle and base of society, harmonises, on the other hand, with the geographical medium. Man, in his quality as an intelligent being, escapes more than any other created being from the natural laws of his planet, but he does not escape entirely from them; he remains, in many respects, the parasite of the terrestrial globe on which his birth has engrafted him.

We have seen that the Dutch made Holland; but the territory thus formed at a later date reacted on the inhabitants. We are, therefore, justified in seeking the influences which a country so different from others, called into existence under

such peculiar and eccentric conditions, must have exercised on the national character, the government, and certain habits of life, but specially have in view the habits which the incessant contact with water must have developed in the numerous population that floats on the rivers, canals, or the sea. Topography, allied to the history of manners, will be the object of the second section of our work, in which we will strive to show the constant relation existing between the constitution of the soil and the intellectual and moral form of life in the Netherlands.

The Dutch territory was covered by two successive invasions. It needed races fond of obstacles to attach themselves to the primitive soil of the Netherlands, and such was the character of the Batavians and Frisons. Brave the barbarians all were, but the latter were distinguished by solid qualities and an uncommon description of courage —courage against things. The obstacles of nature are not surmounted by those brilliant faculties which frequently decide the fate of battles. In order to conquer them, more resolution than enthusiasm is wanted, and more perseverance than ardor. In fact, the predominant trait of the Dutch character is calm and unbending courage.

This persistency exists here in the blood. When you wish to know the inclinations and primitive strength of a race, they must not merely

be studied in grown-up men, but also and chiefly in children, for it is more facile to distinguish in the latter what has been traced by nature. In France, one of the attributes of youth is levity and fickleness of tastes and impressions; the children of our schools pass incessantly in their recreations from one game to another; they are fond of a diversion, of change. Dutch children, on the contrary, will play at the same game for hours. They would be greatly surprised at being told that "ennui was one day born from uniformity:" at any rate this did not occur in Holland. Here the same occupations and the same pleasures succeed each other without producing that mental malady called elsewhere—disgust.

In the public works, in the agriculture and trade of the Dutch, we find the traits of that perseverance which is the true genius of the race, reproduced on a grand scale. The force of this small people, which has performed great things, resides in its patience; through its struggles against the elements and rival nations, it has called to its aid an irresistible ally in time. The Dutchman is active; he gains his ends, however, not by a turbulent activity, but by a silent, sustained, and regular toil. These qualities, whose germ is doubtless in the temperament of the Batavians and Frisons, have been increased and strengthened by the struggle with the soil of the Nether-

lands. Thus it is that the national character results from the primitive forces of the race, and the reaction which these human forces are called upon to exercise against the agents of the physical world.

In order to live, Holland required to be rich. That necessity was imposed on it by the very nature of the territory. The maintenance of dykes, canals, and sluices was an incessantly renewed outlay. The creation of a system of defence against the water demanded an enormous expenditure, and the sea being an untiring enemy, they were obliged to be constantly on a footing of war with it. Growing rich was consequently a question of existence, the "to be or not to be" for the Netherlands. This wealth the Batavian population could not demand of a restricted territory, of a soil created by human hands, and which, despite all the marvels of agriculture, refused to produce sufficient quantities of grain to support its inhabitants. Nor could Holland demand great resources from her manufactures, for she wanted for that purpose two elements which are the soul of industry—coal and iron. She had nothing to expect from her mines, for the Netherlands are, geologically, a poor country. In this state of things, Holland was obliged to turn her attention to commerce. The position was magnificent, the Netherlands

being the rendezvous of the great rivers that cross Germany. Holland and Belgium held, as was once said, the navigation of the Rhine, the Meuse, and the Scheldt by the throat. Internally, this ancient marsh, drained by a multitude of canals, was marvellously favourable for the circulation of produce, while externally the road for the accumulation of wealth was ready traced—the sea was there.

Trees, of which fleets were constructed, descended the Rhine from Germany. After conquering the ocean at home, the Dutch laid it under contribution for their distant enterprises. This people, to which conquest was indispensable, was prepared beforehand for navigation. Vessels of a clumsy shape, but which stood the sea admirably, were sent forth, manned by intrepid mariners. The Dutch sailor felt himself, as it were, no less safe on this wooden ground than on that of his floating country. The seas were disputed, and then there emerged from this handful of men, hitherto supposed to be cold and apathetic, a Pleiad of heroic sailors—the Piet Heins, the Tromps, the Ruyters, the Evertsens, and so many others, who swept hostile flags from the surface of the waters, just as the hurricane disperses the clouds. The ocean is the connecting link of races, climates, and exchanges. The Batavian Republic was warmed beneath the Indian sun; its

light-haired children burned their fair skins by coming in contact with the black peoples of Africa. On nearly every coast of the old and the new world, the Dutch established counters, factories, and centres of political and military action, which radiated more or less in the interior of these divers countries. It was then seen how high a firm and resolute will can raise the fortunes of a small state. Holland had become the entrepôt of the world, and spices, sugar, tea, coffee, silk, diamonds, in short, all the riches of the world, crowded her ports.

At the present day, this maritime and commercial greatness has been succeeded by a more modest prosperity in conformity with the new situation of the country. The contrast between the old and the present period is displayed in picturesque features on the physiognomy of a few Dutch towns. At Amsterdam, for instance, the vivid imprint of the past is still found, and you cannot look without respect on the old store-houses which were the stern guardians of the produce and treasures of two worlds. The Exchange, situated near the port, mingles the hum of business with the moan of the expiring waves. This modern Tyre gazes with royal sadness on its crown which has fallen into the waters; but if it be no longer the mistress of the ocean, it is still one of the cities best known to the vessels that traverse the seas.

The physiognomy of Dutch towns must attract the attention of any one who strives to comprehend the national character. It is at Amsterdam and Rotterdam that an idea can be formed of the labours of this energetic and patient population. These two cities, though living by commerce, are separated by different interests, manners, and requirements. The existence of Amsterdam reveals in itself the genius of the old mistress of the ocean. The great Dutch city rises from the bosom of the seas, wedded to the Y, which enfolds it in its arms. The features that distinguish it are grandeur and power. Its form is a half moon: divided over ninety-five islands, connected together by two hundred and ninety bridges, or sluice-gates, Amsterdam spreads out like a fan its streets divided by canals and lined with trees. Situated in the midst of an old marsh, its houses generally rest on logs of wood, so that if the city were turned upside down, it would offer the astounding sight of a forest stripped of its branches and leaves. The palace forming the City Hall, a heavy but grand edifice, built to a certain extent in the Egyptian style, stands of itself upon 13,659 piles. These masts, which are twelve to fifteen yards in length, generally come from Norway, and are driven into the ground by means of a machine called the *heiblok*. You may see at times, especially in the

vicinity of the port, a dozen workmen whose movements, to a certain extent rhythmical, are measured by a song and directed by an overseer; they lift by ropes an enormous block, which on reaching a certain height, is detached and falls plumb on the head of the mast. At each stroke the tree descends until it stops when the marshy soil has been pierced through and the firm soil reached. It is on this subterraneous forest that houses are built. Such an arrangement caused Erasmus to say that he had seen a city, "in which the inhabitants lived like crows perched on the tops of trees." These houses mounted on piles stand solid and haughtily in the midst of a shifting soil, and in the bosom of waves at one moment motionless, and at another agitated.

If you now take a glance at the port, what a movement! You might say that the entire trade of the different quarters of the globe is collected round these floating storehouses, which bring and carry away merchandise. This activity extends from street to street, and is communicated to the whole city. Among the modes of transport appertaining to this old city, there is one which is singularly original. Just fancy to yourself heavily laden sledges slipping along the pavement as if it were ice. It is true that, in order to facilitate the draught, a species of barrel which drops a shower of rain and thus traces the

road, is placed in front of the sledge, which is drawn by a horse. An army of commissioners, and porters with muscular limbs, move through the throng of merchants and brokers, whose pale faces attest a sedentary life and secret anxiety. You can see by the manner of these men that their every step has an object. *Captant aut captantur.* In this city only strangers walk about for the pleasure of doing so. The banks, the commercial associations, and a few factories, are the true home of this busy and serious agitation.

Rotterdam is a younger and more adventurous city than Amsterdam; it has not the grandeur of its elder sister, and you may seek in vain those marble palaces which recount the history of the wealth of Holland. You do not see the picturesque streets in which the shops have been renovated in accordance with modern taste, though the upper part of the houses has retained the ancient shape, and a stern and gloomy aspect. Rotterdam is built on the Meuse, which owing to its capricious character, may be called the wife of the Rhine; at this spot it is a handsome river, almost a fresh-water sea, with an ebb and flow. As Rotterdam is the first great city the traveller coming from Belgium reaches, it is a worthy introduction to Holland. The vessels enter the whole of the city by a multitude of canals, which cross and continue one another. This pacific

fleet, these wooden edifices mingled with brick houses; these masts blending with the steeples of the public buildings; these sails and flags fluttering in the breeze; these residences whose steps descend to the water's edge; these offices, storehouses, verandahs, and other shelters beneath which men calculate, receive money, and verify accounts; the statue of Erasmus, that is to say, wit, judgment, and Atticism, standing erect in the midst of this commercial activity, which, in itself, adds a poetical charm to matter—all this leaves a long lasting reminiscence in the traveller's mind. The merchants of Amsterdam accuse those of Rotterdam with being deserters; they reproach them for abandoning the old and healthy conditions of Dutch commerce for the utopias of Great Britain. The truth is, that the merchants declare themselves partisans of free trade, risk their capital a little, and compete with the English on some market-places of both worlds. In the style of the streets, quays, and buildings, you feel the movement of a city which wishes to break with the old forms in which its rival haughtily enfolds itself.

Wealth is acquired at Amsterdam and Rotterdam, but it is spent at the Hague (in Dutch S'Gravenhage), though always in moderation. The Hague is an official city, a royal residence. The relations with foreigners have exercised a marked

influence on the manners and character of these three centres of population. At Amsterdam you discover the Germanic influence; at the Hague, the French; at Rotterdam, the English; but, in all these cities, as indeed throughout Holland, the native element always crops out on the surface. The Hague has delightful walks, a much frequented watering place in Scheveningen, which may almost be regarded as a faubourg of the city, a French theatre, concerts in the Wood during the summer, select society, a few modern buildings, quays planted with fine trees, agreeable squares, and a palace of the Estates where the two Chambers now sit, an old and grave building, with which the most dramatic history of Holland is closely connected. French fashions are followed in all the principal towns of the Netherlands, but principally at the Hague. The ladies dress perhaps with less solid luxury than at Amsterdam, but with more taste. The economical and moral character of these three cities, Amsterdam, Rotterdam, and the Hague, prepares us, it will be seen, to follow with a steadier glance the development of Dutch industry and of the national genius.

Two forces combined engender wealth — the force that acquires and the force that keeps. The Dutch are a sober people, and saving in their enjoyment. This frugality is a law of the ter-

ritory, which, despite admirable agricultural works, does not yet produce the means of subsistence in a proportion sufficient for the wants of the inhabitants. It is said, that the Spanish Ambassadors, sent in 1608 to negotiate the famous truce with the Dutch, saw near the Hague several men modestly attired come out of a boat, seat themselves on the grass, and make a meal of bread and cheese, and beer, which they drew from their wallets. When the Spaniards asked who these men were, the reply was, Deputies of the Estates.

The peculiarity of the Dutch character, even when it rises to grandeur, is to remain simple. You are shown at Delft the old and austere residence of William the Silent, which has been converted into barracks. At Amsterdam, the house of Admiral Ruyter ; at the Hague, that of John de Witt ; still exist. You are struck with admiration on seeing these small houses which had the honour of lodging such great citizens, when there are so many large houses which lodge such small men. It is owing to this simplicity of manners that the Batavian republic lived in a flourishing state, that its flag was the terror of the seas, and its commerce and victories spread Holland, so to speak, over two worlds. These habits have been modified by success and the example of neighbouring nations ; but for all that, Holland is still the place

where opulence makes the least display. Florins are piled on florins, like snow on snow, noiselessly. In France the ambition of a merchant is to make a fortune and retire ; but the Dutch merchant continues in business long after that fortune has been made. His mode of life is not considerably altered ; in the midst of his prosperity he maintains a moderation which might lead to the belief that his object is not wealth. This reserve has been differently judged ; but the majority of travellers and writers have attributed it to a feeling of parsimony. Still we are bound to recognise the fact that this economic race proves itself capable, on certain occasions, of noble and admirable sacrifices, and it has even at times its days of prodigality. In the country, for instance, the population live very frugally, but when a Dutch peasant gives his daughter in marriage he goes to a considerable expense for the wedding feast. These marriage festivities had formerly taken such deep root among the middle classes, that the excesses had to be suppressed by law. The number of violins, the value of the wedding presents, the price of the meal for each guest, were all regulated, doubtless because the liberality of the citizens had gone beyond bounds, at least in that instance. Hence this antique moderation must not be attributed only to parsimonious instincts, but rather to a life regulated by the habits of labour,

the duties of the household, and the influences of a climate which counsels temperance in all things.

What has most struck strangers in the Dutch character is their phlegm. We must not feel surprised that a people accustomed to enchain the tempestuous forces of nature should be masters of themselves and their actions. Persons who sleep, work, and amuse themselves, with rivers and tides rolling over their heads, are not greatly terrified by the agitations of their neighbours, or their own internal outbreaks. Even if the political soil of Europe were to give way, what matters? have they not long seen at home the soil striving against the elements without disappearing? It is a further question to settle, whether this phlegm is a temperament or a mask. In some of the Dutch, I confess that it is a thick mask; but when this phlegm is removed, you see behind it singular energy and strength of mind. What, before all, developes in the Dutch race these manly impulses is patriotism.

When the national feeling is aroused in the heart of the Dutch race by any event, prodigies take place. If a foreign conquest is attempted, the Dutch will repulse it by the same simple and infallible means they employ to deliver themselves from the waters. We shall see this little nation, which was an almost imperceptible dot on the map of the world in the 16th century, raise dykes and

ramparts against the most formidable power of the age. In their struggle against the Spaniards, we shall see the Dutch preferring a compact with the sea to one with the invaders. This territory they created with so much difficulty, they will be for a moment on the point of inundating, thus ready to destroy their work and bury themselves beneath the waters sooner than live on a soil dishonoured by the footsteps of the stranger. This calm but indomitable patriotism is found again at all periods. It is in the Dutch blood, as witness young Van Speyk, who, in 1831, himself blew up the magazine of his gunboat, lest he should see the national flag sullied by Belgian hands.

Although capable of enthusiasm and devotion, the Dutch race is before all a practical nation. The Germans reproach them with their want of idealism, and this difference in the turn of mind of the two peoples is again a consequence and imprint of the external media. The forces of nature cannot be combated by abstractions. In Holland, man is necessarily led back to a feeling of reality by the care for his own preservation and the material obstacles he must overcome at each step. The result is a moral disposition which is not without its value. The ruling quality of the Dutchman, which he at times carries to a great extent, is good sense. According as this good sense is allied with talent, it produces an Erasmus,

a Hugo Grotius, or a Boerhaave. Persons have noticed in the Dutch, especially the inhabitants of Friesland, an innate disposition for the exact sciences, and an attachment to what is real and solid, often degenerating into a mania. In Friesland, it is stated, rich farmers may be found, who, afraid of venturing their money in banks, preferred to convert it into coffee services or gold salvers. This distrust of the chimerical is once again a local feature. It is in the nature of man to attach himself to material wealth the more that the possession of the property is menaced. In a country pressed by the sea, and of which certain parts have been lost already, men do not run after shadows; they seize with a prudent hand what is most stable and least treacherous in wealth.

The Republic of the United Provinces has frequently been compared to Venice; but the difference between them is that of the ant-hill compared with the bee-hive. The latter city has its azure sky, its flowers and daggers; the former, its sombre store-houses, sober manners, and secret devotion. The first comer will admire the gilded and perfumed republic of the bees; but a man must be a naturalist to recognise all the grandeur there is in the republic of ants—the abrogation of enjoyment, the economic science of laying by stores, the order in the distribution of labour, and the mutual assistance among the citizens. Holland,

to be known and appreciated, requires to be observed closely; her qualities are not those which are paraded, not such as force attention and sympathy. Sir William Temple, though he wrote two centuries ago, is one of the strangers who best judged Holland. This celebrated statesman says, "Holland is a country where the national character inspires more esteem than affection." What people love in nations, as in women, is more frequently their defects than their qualities. The Dutchman has but few great faults; and as for his qualities, they are more solid than striking. But meaning no offence to worthy Sir William, when a man has received from Holland that free and generous hospitality which is inherent in the manners: when he has met at each step that perfect and general obligingness, that pure and delicate simplicity, and that sincerity of heart which are peculiar to the genius of the race—he experiences for the Dutch character a feeling more tender than esteem.

## CHAPTER V.

THE GOVERNMENT—SELF-ADMINISTRATION—ABSENCE OF POLICE SUPERVISION—CIVILISATION—PROTESTANTISM—THE REFORMATION AND ITS CONSEQUENCES—TOLERATION—CATHOLICISM—LOUIS XIV. AT UTRECHT—THE BELGIAN REVOLUTION—WATER AS A DEFENSIVE AGENT—THE SIEGE OF LEYDEN—THE EAST INDIA COLONIES.

If the opinion be true that "peoples have always the government they deserve," we may expect to find in the civil, political, and religious institutions of Holland some traits of the national genius.

In all periods of history, a relation has subsisted between the constitution of the soil and the governmental form of the Netherlands. The first institutions of which a trace is found in Holland were those for mutual defence against the rivers and the sea. The equality of danger was the connecting link of Dutch society, and here, from an early hour, the maxim of the fabulist was practised—"Help one another." This law of nature in Holland was a necessity of the conquest of the soil. From this supreme necessity, the reunion of

forces, and the agglomeration of workmen upon works whose results they shared, association necessarily sprang. Once the soil was saved and held, a common administration issued from this labour in common. The liberty of election existed from the earliest period in the polders. A few nations of Europe preceded Holland in the establishment of parishes, but nowhere has the genius of municipality taken deeper root in the manners, nowhere have so many parishes risen to a similar degree of wealth and political influence. The power of the guilds was considerable, that of the nobles isolated and restricted. In the councils of Holland the dominating power was that of the middle classes. Even at the present day, the old municipal spirit exists in its entirety beneath the monarchical form, and here each town has a personality, if we may employ the expression. In this little fragmentary country, torn here and there by the sea, occupied by rivers, canals, and lakes, and divided into various groups of interests by the very nature of the hydraulic system, political centralisation would have greater difficulty in establishing itself than in countries whose territory is homogeneous. The French Republic of '94, one and indivisible, met in the federalism of the United Provinces, in the self-government of the communes, in a word, in the genius of the Batavian Republic, a latent force which everywhere repulsed its aiding hand.

The same struggle was continued under the Empire, and with even less success. What Holland demands is the liberty of strength and of local institutions under a common administration.

The sentiment of liberty in a people is a consequence of its struggle with nature. Societies must be freed from the physical forces of the universe ere they can rise to political and moral independence. In this respect, Holland was placed in a fortunate position. Peoples too highly favoured by nature are generally stationary: those races of the East and even of the West, which enjoy a blessed land ready prepared for cultivation, go to sleep carelessly in the bosom of their mother. The Indian, overcome by the influences of his climate, which envelope him like the folds of a serpent, owes the immobility of his institutions to the immobility of the temperature, the seasons, and the planets that shine above his head. Uniform countries have produced those nations, which always seem of the same age and do not know toil. The moral development of nations, on the contrary, is nourished by the incessant difficulties they meet with, the obstacles they surmount, and the destructive forces they enthral. In Holland every conquest of the soil was a step toward enfranchisement. Feeling, so to speak, the ground give way beneath his feet, the Netherlander was forced to have recourse to continual manœuvres to insure his material independence, and each of his

conquests over nature prepared him for the conquest of civil liberties. At the present day these liberties rest on a solid basis: the Dutch acquire slowly, but they never lose anything they have acquired. Progress with them is not subject to those changes and retrograde movements which are for some others the curse of history.

When dealing with a people thus formed for liberty, the task of the authorities becomes greatly simplified, for order springs less from restraint than from the perfect harmony between the institutions and the manners. The absence of all official repression is specially remarkable at public festivities. We witnessed at Leyden a masquerade representing the entry of Charles V. into the town of Dort, which takes place every five years. There was an immense crowd, but no police, and the procession found its own way through the throng of gazers. The town guarded itself that day, as the Wood of the Hague guards itself through the year, without watchmen or sentries. In the vicinity of some great European towns, we should be greatly afraid for these clumps of flowering trees, these birds' nests, these ponds in which fish swim, and these swans left to themselves; but here everything defends itself by its innocence and beauty. The same liberty that prevails at the festivals and promenades, extends over nearly all the actions of life, and the hand of the State is only felt in the collection of

the taxes. Most of the institutions of public charity manage themselves: they consider it a point of honour not to depend on the government, neither through opposition nor distrust, but solely that they may retain the initiative of good works.

In Holland, civilisation and the conquest of the soil marched side by side: the victory over the waters had as its satellite, that over ignorance. The material and moral darkness was dissipated by the same creating breath. Protestantism is a friend of light, for it believes it has nothing to fear from discussion: besides, it was the only religion that could suit Holland through geographical reasons. In countries favoured by nature, indolence has almost been made an article of Faith; it is as it were an act of impiety to straighten the course of rivers, to pluck the mystery from the forests, or struggle with the waves. By what right would man dare to oppose the order of creation or change its laws? In absolute religions it is not only human reason but action too that is fettered by the dogma. Fenelon, though disavowed by Rome, expressed the real tendency of Romish doctrines: it is quietism. The immobility of man in God, respect for the order, whatever it may be, of created things, the doctrine of letting alone applied to nature, all this might hold its own in a country where the earth works while man rests; but in Holland the system was in no way admissible. If

man had let matters go as they pleased, the waters would have expelled civilisation. Holland was never Catholic, at any rate not from this point of view; she has ever protested against certain laws of the universe which imperilled her existence. The Dutch, though sincerely and deeply religious, pin their faith on labour and the contest against matter. This protest of the human will against the sacred force of the elements put Holland on the track of a religious revolution. When the Reformation appeared, Protestantism was engrafted in the active instincts of the Batavian race, as it was in the economic forces of the other Saxon nations. The Latin or Catholic races are artists: the Protestant races are industrial, agricultural, and commercial.

Holland, almost entirely surrounded by water, isolated from Europe by her language, and nearly forgotten in a corner of the Continent, was to some extent predestined by nature as a place of asylum for all the victims of religious and political persecutions. In this country, whose existence was incessantly menaced, a toleration based on gentleness of manners, the need of mutual assistance, and the fear of a common danger, was developed. Holland, amidst the deluge of blood which covered the world towards the close of the 16th century, was the ark of salvation. There all those whom the mother country had rejected,

found once more temples, a home, and certain civil rights. The philosopher must revere this land, which has received the footsteps of all free thinkers; where Bayle the sceptic could live in peace, and Spinoza himself was not burnt. Respect for all strong and honourable convictions, and for all unmerited misfortunes, was allied in the Netherlands to a natural feeling of benevolence. The Protestants of Belgium and France, driven away by the hangmen of Philip II., by the massacres of St. Bartholomew, and the revocation of the Edict of Nantes, found in Holland a Church, whose language, organisation and religious edifices still exist in the Walloon Church. Most of the strangers waited for the reign of the persecution to be relaxed, and entered Holland as a haven; but they remained there. Last of all came the Jews.

There is a justice inherent in human things and actions. He, who according to the language of the Gospel, has rewards for every act of charity, even for the glass of water given a poor man, would not allow this religious toleration to pass without results for Holland. England owes her industrial prosperity to the strangers who flocked to her shores through the wars of the Reformation; and the Netherlands owe, partly at any rate, the splendour of their commerce to the Portuguese Jews. The banner of religious liberty attracted thither all those whom the old Catholic world would no longer

have, and this has proved a source of intellectual and moral development for Holland. In the scale of physical life animals rise by the addition of new organs ; in the same way, in the scale of social progress, the constitution of races is elevated by becoming complicated. Each of the adjoining groups brings, as it were, a new member to civilisation. In Holland the accession of foreign elements was therefore a piece of good fortune for the country: liberty was fecundated by its own strength and by the auxiliary forces it assimilated. It is from the amalgamation of special faculties with the different gifts derived from strangers, that the greatness of Holland emerged in the 17th century.

This religious liberty has remained one of the characteristic features of the Netherlands. Here Protestantism, though dominant, abstains from any external manifestation of worship; the streets are to a certain extent atheistical. Still, it must not be concluded from this that there is no faith ; on the contrary, Holland is one of the most religious countries on earth, but religion is there an affair between God and man. Regarding the size of the country, no other has so many sects as the Netherlands; but at the same time the religious communities nowhere live on a better understanding. They have taken seriously St. Paul's expression, *oportet hereses esse*—it is necessary that there should be dissenters. The Catholics, for a long time regarded as over-

thrown, at the present day enjoy all civil rights in Holland. Still, no mistake must be made: under this toleration the national sentiment remains Protestant. Holland loves the religious Reformation as mothers love the child they have engendered in suffering. Everybody knows what the Netherlands suffered from the Spanish Inquisition; that page, spotted with the blood of the martyrs, is the great page of Protestantism. It is read in the schools throughout the country, and the children are thus inculcated with respect for those who died for independence. The Dutch fought at that period for the first of liberties, the liberty of the mind, and to them the Reformation was the buckler of the national defence. Had it not been for faith in the justice of their cause, a handful of men would never have been seen to dash out of these marshes, beat so formidable an enemy with such feeble resources, and overthrow armies which in that day passed as invincible. A small nation, which endured without flinching both the weight of the sea and the weight of Spain allied to Rome, that is to say, of nearly the entire Continent of that day, has the right to display its religious liberties, as a warrior does his coat of mail. In several towns of the Netherlands, Catholicism moreover was not destroyed, but simply expired. At Utrecht, for instance, the Catholic bishop dying in the moment of the triumph of the Reformation, the

priest and the dogma were buried on the same day in the Catholic church. Over the open grave the reformed chapter sang Luther's hymn in lieu of the *De profundis.*

The Bible is in Holland a national monument. When Louis XIV. besieged Utrecht, he had all the copies of the Scriptures that could be seized burned in the square of the great church; it was like delivering intellectual Holland to the flames. Accustomed to regard Calvinism as the palladium of their rights and their national existence, the Dutch fight on all occasions truly *pro aris et focis.* Religious reform is with them identified with patriotism. Rightly or wrongly, the Dutch Catholics are objects of suspicion to Protestants of the old school; their feet, they say, are on the soil of Holland, but their hearts are at Rome. These are prejudices, if you like, but it is just to allow that these prejudices are rooted in the whole historical tradition of the Netherlands. When, after 1830, Belgium revolted and pronounced the word separation, Holland saw distinctly whence the wound came; she recognised the hand of the Catholic clergy in the Belgian revolution. There was in the Netherlands a Protestant upraising of arms, old Calvin started in his tomb, and everybody knows now that, had it not been for the intervention of France, Holland would have recaptured her southern provinces. These events did not

contribute to the rehabilitation of the Dutch Catholics, who were accused of having regarded the efforts of the Belgian Catholics with a passive countenance, if not with direct and avowed sympathy. The Netherlands, that little country which great states press and menace, have ever felt, like the Jews of old, the necessity of protecting themselves by a national Deity. The Calvinist faith is incorporated with the defences of the territory, the public memorials, and the visible history of the country; and from this lofty position it defies the enterprises and claims of the dissenters. On the day when the Catholic party triumphed in Holland they would have to take down the statue of William the Silent, now standing in one of the squares of the Hague, for on that day not only Protestantism would fall, but with it the whole glorious past of the Netherlands nation. But the religious question in Holland demands a special and profound study; we only wish to indicate the relation, hitherto too much neglected, which exists between the geographical form of the Netherlands, and the general form of the belief.

If Protestantism is the moral bulwark of Holland, water is her means of national defence. It is one of the merits of the Batavian race, that it has employed for its wants and security the elements which nature gave it as enemies. The famous threat of the Parthians, "If you do not dive like

frogs, you will not avoid these arrows," would not greatly terrify the inhabitants of the Netherlands. At the slightest signal the country would disappear under water, for voluntary or artificial inundation is here the basis of the strategic system. In their wars with the Spaniards, and notably during the siege of Leyden, the Dutch summoned to their aid this dangerous ally, and a true combat of Tritons was then fought, half on land and half in water. These means, it is true, have not always proved successful. The soldiers are now taught to manœuvre on the ice, in order to avoid surprises in the winter, which suddenly renders water solid. Thus enveloped, guarded, and fortified, with her sea board protected by sand banks, a natural and excellent defence, Holland holds herself calm and resolute, with her eyes fixed on the Indies.

The colonies are a source of wealth to her, and though many of her old possessions have been torn from her, what remains is very considerable, and may be increased in skilful hands. It is no rarity to meet Dutchmen who have passed twenty or thirty years in the Indies; they readily tell you about what they have seen, the sun of Java, the brown women, the tigers, and the banana trees. A beam of this sun pierces through the fog of Batavia; at the flower-shows, often even in the windows, you see Indian plants. The birds of these happy countries display their plumage in the zoological

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gardens and collections. There are dictionaries and grammars of the various languages spoken in the Indian Archipelago. In the seaports, among the woods and spices, you gain, so to speak, an idea of this other world, and there you find the power of commerce. In order to preserve these distant possessions, it was necessary to ameliorate the condition of the conquered, by transforming their territory through the help of agriculture and labour. Holland, thanks to her practical ideas, had the secret of colonising, and she not only contrived to extend her conquests but to keep them. Then, again, what this industrious people did not possess, it gave itself. It used to be said formerly that Norway was the forest of Holland, the banks of the Rhine and Garonne her vineyards, Pomerania and Prussia her corn fields, the Indus and Arabia her gardens. A nation strong against nature must be strong against other nations, and the relations the sword did not open for her she established by treaties and alliances.

The influence of the soil of the Netherlands on the inner form of government, on the conquests and international relations, has been considerable; but this influence will seem even greater, if, leaving the formalities of history, we descend into private life. Geographical conditions have been here the root of manners, and it is a new point of view which is not uninteresting, for the originality of peoples specially results from their domestic habits.

## CHAPTER VI.

LIFE ON THE WATER—THE CANALS—MILK BOATS IN AMSTERDAM—THE TREKSCHUYT—WATER OMNIBUSES—A NIGHT ON BOARD—DUTCH SCENERY—SUMMER HOUSES—THE CHIMES—CONSERVATORIES—HYACINTHS—DOMESTIC LIFE—THE STORK—GREAT CLEANLINESS—THE ROADS—DUTCH PAINTERS—CHARACTER OF THE DUNES—METEOROLOGY—THE KERMESSE—THE AANSPREKER—ILLNESS AND DEATH.

THERE is in Holland a life unknown elsewhere, or at least but badly known; it is life on the water. You must visit this country to comprehend the touching melancholy of the *Spiritus Dei ferebatur super aquas.* Still, what floats on the waters is probably less the Spirit of God than of man, for in the Netherlands you are incessantly recalled to the feeling of reality. At all the spots where nature had forgotten to place rivers or streams, Dutch industry has made canals. These waterways lead not merely from one town to another, but even to each village, we might almost say to each country house; hence, such an arterial system could not fail to be marvellously favourable to the circulation of produce. Through Haarlem alone

22,000 boats pass annually. An English traveller asked himself, two centuries back, whether there were not more people in Holland living on the water than on land. As the majority of these canals are higher than the adjoining fields, and as they are concealed by dykes, at a certain distance off you can see neither water nor boats, but only the swelling sails, which have the appearance of making an excursion about the country. There are boats for conveying passengers; the rich and busy classes despise this mode of locomotion as too slow or too vulgar, but they lose those landscape beauties for which the speed does not compensate. Be on your guard against railways in Holland, for travelling by them is running through the country, but not travelling. Those who do not consider the time devoted to the gratification of the sight as lost, poets, artists, the contemplators of nature or of local manners, will always prefer these slow and rustic boats to the winged carriages.

Heaven forbid that we should condemn steam, whose services, on the contrary, we admire, but Holland is of all countries in the world the one which, owing to its abundance of canals, could most easily do without locomotives. Elsewhere navigation has never been able to compete with the iron ways, but in the Netherlands the greater part of the carriage still continues to be effected by water; and this economic method will for a long

time supply most wants. The services rendered elsewhere by carts are here performed by boats; the gardener himself pulls to market his boat laden with vegetables, fruits, or flowers, just as in the south of France a donkey is led along. All this verdure, all this wealth of spring, arranged with a vivid feeling for colour, really is a pleasure to look upon.

At Amsterdam, on quarter days, the furniture is moved from one part of the town to another on the canals; chairs and tables, arranged with some degree of symmetry, appear to be awaiting visitors. These saloons on the water move along through the crowd, which does not even look at them. Milk comes to Amsterdam from the adjacent farms by the same route, in the morning at five or six o'clock, and in the afternoon at about three. The North Holland canal, whose width more than one river might envy, sees boats coming and going, loaded with oak buckets, adorned with copper handles and hoops. The milk girls who hover round these boats are frequently young and pretty; their large hats of shining straw, the brim of which is slightly turned up in front and back, their large earrings, and coral bead necklaces, set off their ruddy complexions. The milk boats sometimes meet on the Amsterdam canals water boats coming from Utrecht. Such is in fact one of the singularities of this Northern Venice; though seated in

the midst of water, it has none to drink. Flat boats, true water carriers, were obliged to come to its help till very recently, when human industry sought rain water in the sand of the dunes, and brought it to Amsterdam by engines whose strength and boldness of conception are admirable; but the use of the new fountains has not yet spread through all classes of the population.

The boats specially employed for the passenger service are called *trekschuyten.* They are a species of gondola or water diligence. Along nearly the whole length, which is about thirty feet, runs a box or wooden house, frequently painted green; the roof, on which the sailors walk to perform sundry operations, being covered with a layer of pounded cockle shells. This house is divided into two compartments or cabins; the larger one, situated near the prow, is common to passengers and luggage. Here, during the winter, the worthy people, shut up as in a box, swim along in a cloak of tobacco smoke, which relieves the tedium of the voyage. In summer the wooden shutters are removed, and the hatch is raised from the orifice by which the travellers descend. The second compartment is the cabinet, called in Dutch the *roef*, which is entered through folding-doors. This second cabin is small, but fitted up with some degree of taste. The windows, four or six in number, are glazed and have red or white curtains,

according to the season. In the centre is a table with a copper vessel containing fire, and another smaller one to receive cigar ash, both cleaned and polished in a manner only found in Holland. Add to this, to complete the furniture, a mat, a looking glass, and, in winter for the ladies, a foot-warmer, called the *stoof*, containing a small earthenware vessel with two or three lumps of lighted peat in it. Along two sides of this cabin run cushioned benches, on which the travellers sit down opposite to each other. Sometimes there are on a shelf a few volumes belonging to the boat, and forming a floating library at the service of the studious passengers. The whole national character is revealed in this simple and minute attention to comfort. At the bows, the space not occupied by the cabinet is filled with merchandise, balès, and barrels; while the poop is left to travellers who wish to take the fresh air, and the helmsman, who steers and smokes the while with the regularity of a steamer.

The master of the trekschuyt is a worthy Dutchman, with an honest and placid face, who receives the fares from the passengers in a leathern purse. In the front of the boat stands the mast, which is lowered at each bridge, and to the top of which a long rope is fastened, the other end being on the bank. This rope is fastened to the horse that pulls the boat, on which the postilion (*het jagertje*) is

mounted. This driver, who is generally a young fellow, wears over his shoulder, in some parts, a buffalo horn, which he blows, either to give the signal for starting, or to have the bridges raised, or else to warn boats coming in the opposite direction on the same canal; but generally he contents himself with giving the warning by shouting. When the trekschuyt passes through towns, the horse is unfastened, and it is propelled by poles through the tangled web of boats. The Dutch boatmen are neither turbulent nor quarrelsome, and it is a pleasure to see them working in silence upon the silent waters.

The boats are, with the mills and the headdress of the women, the characteristic types of Dutch manners. At times they only go short distances, as, for instance, from the Hague to Delft, and are in that case water omnibuses. When the journey is long, each establishes himself in the cabin as in his room, and carries on his business; for it is the nature of the Dutchman to enconomise the stuff of which life is made. People write, eat, and sleep; the ladies produce their needlework, the elder ones their knitting. From one town to another is with them the distance of half a stocking. It is not rare for an organist to be present in the front cabin, who whiles away the fatigue of the journey by playing. On Sunday, especially toward evening, young girls are fond of

singing in chorus; and this song of the waters has something simple and soft about it which is affecting.

On the trekschuyten floats old Holland, with its language, manners, and conscientious and powerful originality. On the railways it is rare for a traveller coming from France to meet fellow-passengers who do not understand him; in the barges, on the contrary, it is very rare to meet Dutchmen who understand or speak French. It is generally believed that, to identify yourself with a foreign nation, you must speak the language; the principle is true, but some restrictions must be made. In Holland, where there is candour in the relations of life, you are often less of a stranger because you speak the language of the country more or less incorrectly. The necessity of understanding each other by a word, the language of symbols, the medley of sounds badly pronounced, or misunderstood—all this creates a species of sympathetic current whence arises a sort of intimacy. There are some trekschuyten in which you pass the night; at about six in the evening, in the event of the master being polite (and we never met any who were not so), he invites you to take tea. You then see a little cabinet produced, containing cups, sugar-basin, and tea-pot of black earthenware, which is not inelegant. The kettle is placed on a species of stove covered with Chinese designs, and contain-

ing a vessel filled with burning peat. At night the *roef* is divided into two parts—a saloon, and a small sleeping room, of which the curtains are raised. A common bed, occupying the entire width of the cabin, and on which men and women sleep honestly side by side, invites you to take your share of the universal calm and rest of nature. This bed is composed of a mattress and counterpane, and you lie down on it full dressed. During this period the boat continues its noiseless voyage through the waters, which divide in a silvery furrow on either side the prow.

On the railways, steam effaces everything through its speed; in the boats you enjoy at your ease the scenery, and the physiognomy of the towns and villages you pass through. Seated near the helm, you allow your eyes to wander over the water, which yields with a slight plash to the movement of the boat; you notice the white, red, or black sails that enliven the solitude of the canal; the prairies where cows, covered in spring with warm blankets, gravely chew the damp grass; the beautiful marsh birds, which are seen nowhere else; the women, silently washing the linen; or the continuous fringe of chateaux, country houses, and gardens that lines the canal banks.

The scenery of Holland has often been accused of monotony; but possibly persons have not looked twice at it. Here you must not seek variety on

the earth, but in the sky. Look up! the sky is more diversified in the Netherlands than anywhere in France. Those immense clouds, with their thousand shapes, their changing colours and rapid wings, impart a singular movement to the landscape. But the land and the water are not without diversity. The nature of the Netherlands is photographic," clear, positive, and delicate, abounding in minute and charming details. Individual property is neither imprisoned nor hidden; the fields are walled by water. In these ditches that take the place of hedge-rows, a perfect aquatic flora is expanded, not less rich or varied than the terrestrial flora. In spring the sombre surface of the canals is studded with little white flowers, soon to be joined by the lily and the iris; it is the festival of the waters. There is not a plant, however small, in this cold and damp vegetable nature, which has not its day of beauty. Nor is life absent from the scene. On the banks of the canal marches from distance to distance a sturdy lad, and at times a bending woman, painfully towing a boat along. These wooden houses lodge families, which are born, live, and die in them. Often you may see a mother sitting near the tiller, and gravely giving her infant the breast. The Dutchman is so naturally a sailor, that once on the water he never looks as if he wished to reach his destination. The feeling which these persons, cradled at their

birth on the sleeping waters of the canals, know the least, is impatience. You meet, now and then a boat-woman after Rubens's taste, who, proud of her *embonpoint* and second youth, casts around her a cold and resolute glance, like the Queen of the waters. In these travelling-houses dwell domestic animals, which have become, as it were, amphibious, and have the calm faces of their masters. Between the lights the surface of the canals is changed into a mirror, in which all nature laves and purifies its image. On the banks, the trees, wearied by the heat of the day, dip the ends of their leaves into the water, as if to drink. At night, if you stand near the tiller, you enjoy a spectacle that has some grandeur about it. The mills with folded wings, which seem to be gazing on the stars, the placid light of the moon on the tranquil waters, the innocent attitude of the small houses slumbering on the banks of the canal, and from which a cock-crow is audible now and then—all this reveals to you one of the rustic sides of Dutch life.

Holland is not only the country where you find the most water, but also the one where you find the most motionless water. The canals are arrested rivers, and this serenity of the water is related to that of the manners, habitations, and countenances. Near the towns, Chinese pavilions are built on the canal banks, where people meet in

fine weather to drink tea and coffee. Some of these pavilions, whose roofs are covered with varnished and glistening tiles, bathe their base in water with a joyous air. In these nests, which repose under an abundant verdure, domestic happiness seeks a refuge. The stranger who wanders about alone regards with an eye of envy these little retreats, which are so proud of their cleanliness, and look at themselves in the canal, like a girl before a looking-glass. Here the ladies apply themselves to needlework, while looking out at the passing boats and travellers; while for the men the hours evaporate in rings of smoke. It has long been remarked how naturally a pipe hung from a Dutch mouth, and most local habits are based on the hygienic conditions of the climate. Beneath the foggy sky of the Netherlands, a necessity was felt to produce smoke against smoke; it is a sort of local homœopathy. Some physiologists have asserted that tobacco smoking befogged the intellect, but this observation is contradicted by the Dutchman, who lives in a cloud, and whose mind is more precise, positive, and clear in its details than that of any other people. If this opium of the North does not contribute to vagueness of ideas, it might possibly lull the brain to sleep.

Less loquacious and more contemplative than the southern Frenchman, the Dutchman is silent

but he is not taciturn. Gay nations are not always happy nations; there are some men who laugh on the same principle as children sing when crossing a wood by night, to overcome their fears. In Holland we find what thinkers born in periods of moral agitation never attain, and what Dante sought—peace. It is not rare to notice on little wayside hostelries the inscription *Pax intrantibus!* We might say that life is like the water of the canals, it does not flow. Be it illusion or reality, it seemed to us that the hour struck here more slowly than in France, and it is ushered into life with a song. The carillons produce, at a certain distance, and on the water, an effect difficult to describe. The whole character of Old Holland is found in these solemn peals, in these Æolian voices, which the fathers heard, and their sons will hear after them. At Utrecht, a thoroughly protestant town, the chimes play a hymn according to the reformed ritual. This puritan gentleness, these notes which the bells clash out in the air, harmonise with the calm and reposed hues of the scenery. The gardens that border the water are kept up, gravelled, and raked with extreme care, and trees loaded with fruit offer a pleasing variety to the slightly monotonous character of the verdure.

Tacitus, in writing of these low and cold countries, says, "The riches of autumn are unknown

to them; these people have only three seasons—winter, spring, and summer." In Holland the horticultural art has created a season which nature did not indicate. Man has made an autumn here by introducing the productions which are the ornament and crown of that season. In South Holland especially, grapes flourish, the fruit of which is destined for England. The Netherlands gardeners have ever excelled in the art of accelerating the ripening of fruit, and they are even said to have taught other people the management of hothouses. The Dutch autumn under glass is rich in melons, and all sorts of fruits and vegetables of which Batavia was ignorant.

In Holland the towns and villages touch one another, and this is a consequence of the slight extent of territory. The houses are small, discreet, and circumspect; you notice in the habitations, as in the character of the inhabitants, that moderation of tastes and desires which is the philosophy of happiness. The Dutch do not suffer like the Belgians from the whitewashing malady; they leave their houses the pleasant colour of the bricks. This red colour, combined with the verdure of the trees, the dark blue of the canals, and the gold of the sun, gives the towns, and often the villages in the Netherlands, a holiday aspect. A widely spread taste, especially among the women, is that for flowers, for here home life is a poem, and all

means are sought to idealise it. We had already noticed in Flanders that moral habits were trained with the love of flowers; in the Netherlands it is an inclination which is becoming general. A rose expanding behind a clean and thoroughly transparent Dutch window resembles the perfumed soul of the house. These domestic gardens are sometimes perfect conservatories, so rich and varied does the Flora appear. One of the most admired plants in Holland is the hyacinth, and there is any quantity of varieties; the *Sephrane* (white), the *Unique Rose*, the *Jenny Lind*, the *Mind your Eyes* (red), the *Amiable Shepherdess*, the *Othello*, which latter is of a dark and tragic colour, as suiting the Moor of Venice. If transplanted to other countries, these bulbs degenerate; true children of Batavia, they only find pleasure in Holland.

Behind the curtain of flowers a young maiden face may be glimpsed, which hides itself, though after having been seen. The women of the Netherlands are curious as all the daughters of Eve, but it is a curiosity which is hidden behind a species of green frame-work called in Dutch *horritje*. It is the habit to look at what is going on in the street, not in the street itself, but in two mirrors set at an angle, which reflect objects, and deserve the name the local idiom has given them, that of "spies." A blonde Hollandaise, or even a brunette (for black

hair is not rare in the Netherlands), will sit for hours gazing on what is going on outside. This silent image of movement and life harmonises with their character. Dutch beauties are timid and diaphanous, and their faces resemble the waters of the canal sleeping before their windows. We all know the reputation of still waters; but here internal passions are kept in check, as we were told, by the regularity of life and simplicity of manners.

Nothing is lacking to the peaceful and contemplative joy of the houses in the small towns or villages of Holland when the stork by chance builds its nest upon them.

In this country the same naïve and touching respect is shown the stork as in other places is shown to the swallow. The stork, in fact, is a swallow on a large scale; it wages with frogs, toads, rats, and lizards, that useful war which the guest of our chimney-pots and old chateaux carries on with insects. Storks are, moreover, regarded as birds of good omen, and you need have no fear as to them being killed. Happy the roof near which they deign to settle, happier still the one they select as their domicile! Perches and artificial shelter are even constructed to attract them, for a stork's nest is the crown of the house. In some parts of Holland if a stork breaks its leg by any accident it is supplied with a wooden one.

The abundance of water ever ready to hand necessarily produced habits of cleanliness in Holland. Without speaking of Broek, that curious village which seems detached from a Chinese vase, we found everywhere, even among the poor, articles of tin or copper which cleaning had converted into silver and gold. In Belgium a few prizes for cleanliness were instituted, but in Holland people are cleanly without knowing why, and do not require the interferences of a Monthyon. The general toilet of the houses is performed on Wednesday, Friday, and Saturday; on these days of *schoonmaking* (general cleaning) the street belongs to the servants, and they may be seen drawing and emptying buckets of water with a species of exaltation. These girls, generally so calm, suddenly change their character, and they might be called the Bacchantes of cleanliness. In Holland the walls are brushed, as a coat is brushed elsewhere; both the out and insides of the houses are washed, rubbed, and dried with peculiar care.

Several geographical reasons may be assigned for this cleanliness; it is a recognised fact that the atmosphere of the Netherlands deteriorates wood and metals very rapidly, and hence the necessity of painting, rubbing, and polishing them incessantly to avoid mildew or rust. If the winter

be cold and the spring sharp, the summer is frequently very hot, and as, owing to the smallness of the territory, the population is packed very closely together, the country would be uninhabitable were it not for the care devoted to cleaning the houses and towns. It is thus that national customs emanate from natural causes which are not always seen or observed, but whose link, however delicate it may be, exists for all that. On the other hand, it is in the nature of man, and especially in that of woman, to attach oneself the more to a home, the cleaner and more adorned it is. The cleanliness of the abodes has contributed in Holland to the liking for a family life. The house, which the ancients called the *mundus muliebris*, requires to be on a small scale, the image of that order which prevails in the universe, if it is to retain its grasp on the affections. This cleanliness, which is found even in the stables and cow-houses, is the cause of the splendid health of the people and domestic animals. In the villages it is a pleasure to meet, especially on Sundays, a strong, healthy, and smartly dressed population. The women wear head ornaments as rich as they are quaint; they have made their toilet on that day, and offer up a prayer to be beautiful in the sight of God and man.

As the greater part of the traffic of the Netherlands takes place on the canals, the roads are

generally magnificent and kept up like the alleys of a park. You often find on the same road a tramway, a sanded path for foot-passengers, a road paved with brick for carriages, and a ride of soft earth for saddle horses. The taste of the farmers is revealed in their carts, which are of an elegant shape, with bouquets of flowers painted, carved, or gilt on the frame. From a mere sight of the Netherlands you can form an idea of Dutch art. The sky is not bathed, as in the south, in a light so intense that it absorbs everything, but it is a prudent and discreet, though bright light, which imparts a value to every object. The water, which is always here the soul and life of the landscape, runs like a silvery thread between the trees. On the plains where grass is abundant, Arcadia with her flocks, her shepherds, and especially her shepherdesses, disports. The face of the women is delicately lit up, and in such a medium art aims less at the ensemble than at the details and colouring. The Dutch school has been accused of being deficient in ideality, but what imparts ideality to a landscape is an extensive, vague, and open horizon. In the Netherlands the horizon is generally sharp, distinct, and restricted; it leaves nothing to the imagination. Still you must make no mistake; this does not constitute the whole of Holland. The polders made Gerard Douw, Van Ostade, Paul Potter, Ruysdael, and Cuyp; the dunes

made Rembrandt. The dunes are the desert; there you find that vigorous opposition of light and shade, that savage and rent character, that uncultivated vegetation, those mountains, gorges, and precipices, which gave a style to the most Spanish of the Dutch painters. One portion of the dunes in fact resembles a sierra; this sea of furrows and solid sand, covered by a tawny vegetation of thyme, broom, and heath (a species of miniature virgin forest), these coasts whose strength, like that of Sampson, dwells in their hair; these snipe, curlew, gulls, and large crows passing with outstretched wings over the dunes; and then, between the crests of these relative Alps, a corner of the sea glistening and polished as a sabre blade —all this reveals the energetic side of the Dutch character. We can understand Ruyter and all the astonishing sailors, whose race is not yet extinct in the Netherlands. Their intrepidity seems the greater because it is candid; the Dutch mariner is as much at his ease on the sea as on his canals. He may often be seen crossing dangerous waters in frail and damaged boats, without even suspecting his heroism. Tempests are familiar to him, he has lived with them from his infancy, and we might almost say that he ignores them through his repeated victories over them. The dunes may give the feeling of masculine energy, but at the same time it is not rare

to find in the almost naked sand, only a few paces from the sea, a little flower which the wind has sown, an image of that love of country and of family which are allied to stoical courage in the heart of the rough sailors.

An influence which has contributed to harden physically the children of the Netherlands is the climate. This climate is not precisely very severe, but it is damp and inconstant; we must not lose out of sight that people live here on the sea. The meteorology of Holland is as peculiar as her history, her origin, and her manners. In spring a fine day is most usually announced by a cold fog which attaches itself to the ends of the branches, where it forms small crystals. The trees with their stripped branches then resemble gigantic stalactites; at about eight or nine in the morning the crystals melt before the sun, and the forest constructed by the hoar frost falls in a shower. The moon, especially on cold nights, shines more brightly through the clouds than it does elsewhere. In summer two or three temperatures often succeed each other on the same day, and if the seasons be travelling climates, they have a capricious and changeable temper in Holland. Even in summer the damp lasts a long time after the army of mills, those advanced sentries for the physical defence of the country, have, in April and May, drained the polders inundated during winter; on

the night of the finest days a white mist rises from the ground and steams on the surface of the prairies. It would be interesting to know whether cultivation and hydraulic works have, by warming the soil of the Netherlands, modified the conditions of the atmosphere, but unfortunately meteorological history is still in its infancy here. There is at Utrecht an observatory whose labours are estimable, but its experiments only go back for a few years. Everything, however, leads to the belief that the climate of the Netherlands has improved during historic ages.

If authentic proofs are lacking to appreciate this amelioration, it is not the less probable that the drainage of the lakes and marshes has exerted a fortunate influence over the seasons of Batavia. By expelling the internal waters, the country must have grown healthier, and man has daily improved the conditions of a climate which is still subjected to storms and the caprices of the sea. Scourges, moreover, bring a compensation with them, and humidity becomes one of the elements of cultivation. The inundations annually renew the fertility of the land; to them are owing the rich and luxuriant prairies of North Holland, where the horned cattle, lost in the grass, are lazily engaged in making milk.

The eccentricity of the medium creates, keeps up, and preserves the originality of the national

customs. The old reputation of the Dutch Kermesses is well known; each town, each village, has its own, which generally falls in summer. These fêtes last for several days; you see there booths, quacks, animals more or less fabulous, circuses, shows, giants, wax-work and wooden horses. The girls go to have their fortunes told in a tent, the discreet and secret cave of the sibyl. The most elegant thing is a number of small houses in a slightly theatrical taste, with gilding, lustres, mirrors, a few China ornaments, furniture painted with some degree of skill, large copper vessels filled with a white paste, and a female seated on a tall chair before a crackling fire. In these portable houses there are private rooms closed with red and white curtains, where you eat pancakes about the size of a five-franc piece. The Frison women are another ornament of the festival, for their costume, more especially the head-dress, is in charming taste and charmingly clean. They make excellent gauffres, which they carry about the town in baskets.

The Dutch are also very fond of pickled vegetables; neat booths display a large number of jars symmetrically arranged, in which swim onions, cucumbers, lemons, and prawns. All these "sours" are eaten with eggs.

As the festival generally lasts a week, Saturday is the jolliest day, and then in truth Dutch mer-

riment is somewhat coarse and noisy. The vivacity, the nocturnal dances, the liberty which confounds and mingles all classes, the songs kept up till day, the gaiety of the women which contrasts with their habitual placidity, the mysteries which night loves to conceal under its veil —all these resuscitate the pictures of the Old Masters, who celebrated the Bacchanalia of the North. But in the midst of this joyous intoxication, the simplicity of Dutch manners is not lost; you might call it an orgie in an earthly paradise. A large number of men and women move about from fair to fair, sleeping like the Scythians formerly did in houses on wheels. Still the Dutch Kermesses are in a state of decadence; the constantly increasing facility of commercial relations and the development of warehouses and shops, are daily robbing them of any importance they might have possessed. Their old prosperity is only maintained in certain towns of Friesland, where the local habits and manners seek shelter behind the Zuyderzee as the guardian of traditions. In the Scandinavian mythology, there is also a sea round which nothing changes, and men themselves do not grow old.

Mountains are the one thing Holland is deficient in, and perhaps we may refer to this cause, partially at any rate, the slight development of architecture. A mountain is to a landscape,

what the gesture is to a face, and in those places where it is absent, the architectural feeling must be restricted. In Holland the art of building has been more anxious to produce pretty houses than public edifices. Here everybody lives at home and the Dii Lares are worshipped. Small gardens hidden in the interior of the houses, where flowering shrubs exhale an odour of domestic felicity, are in the evening the gathering place of the family and a few friends; we noticed, especially in Rotterdam, the narrow black painted doors, through which you enter as into a sanctuary. When a person falls ill, his domicile is impenetrable, and the house-bell is silenced. A health bulletin is fastened outside the house, and this precaution checks the importunity of friends without repulsing their solicitude. The repose of women after confinement is respected in the same way; a notice is stuck up that mother and child are doing well. At Haarlem the knocker was formerly adorned with lace and ribbons, whose colour indicated the sex of the new-comer. If the sick person dies, his decease is announced in the town by the *Aanspreker*, a sort of living obituary, whose somewhat tragical costume, black crape cloak, frill, three-cornered hat, and mournfully declamatory voice, greatly astonish strangers. He might be called the ghost of old Dutch manners. This man also announces births as well as

deaths,—those who come and those who go. Burials are performed in the morning with strict and discreet pomp. The friends who have attended the funeral return to the house of mourning after the ceremony, when they take a slight collation, doubtless in memory of those ancient banquets, at which the health of the dead was drunk in bumpers.

Holland, as we have seen, is the country before all where man has contracted the most intimate alliance with the geographical form. The manners, institutions, and customs of the inhabitants, are derived from the conditions nature laid before the ancient conquerors of the Netherlands. These masses of water which let themselves be treated by the hand of man with child-like submission, as if they had at last recognised the superiority of intellectual force, have assisted, to some extent, the progress of civilisation. Peaceful as its canals, vigorous as its dunes, terrible on the seas as the tempests that beat its coasts, the Dutch genius harmonises with the character of its territory. The two principal trades of the Netherlands, the extraction of peat, and the fisheries, are equally connected with the constitution of the soil. It was, therefore, essential in the first place to indicate the geological formation of the Netherlands, and the relation of that formation, the combined work of man and nature, with the

habits of a self-made people. If the primitive Batavians were to return to Holland, they would not find their old marshes again, but they would recognise in their descendants the stamp of their race and of the external circumstances that modified it.

## CHAPTER VII.

COMBUSTIBLE MATERIALS—DUTCH PEAT-BEDS—THE JOYS OF HOME—CONSUMPTION OF PEAT—THE HIGH BEDS—ASSEN—MODE OF EXTRACTING PEAT—DIVISION OF LABOUR—DRYING THE PEAT—FOSSIL PINES—GREAT FIRES—THE LOW PEAT-BEDS—A SECLUDED SPOT—MODE OF OPERATION—PEAT-PASTE—TURF-POTTEN—SALE OF PEAT—VARIETIES OF PEAT—COAL VERSUS PEAT—COMPRESSED PEAT—CARBONISED PEAT—FOOT-WARMERS—VARIOUS USES OF PEAT—NOTHING WASTED—THE SIEGE OF BREDA AND THE TURF-BOAT.

In nearly all civilised countries, man after having destroyed the forests has sought under the earth for means of warming himself. He lives upon an investment of ancient vegetation, which the wise foresight of nature laid by for his wants. Coal, anthracite, and peat, according to the different geological countries, compensate for the absence of wood, which is becoming more and more rare. Peat-beds are distributed over several regions of Europe; they are found in England, France, Germany, Switzerland, and even in Italy; but nowhere are they so abundant as in the Netherlands, which may be called the country of peat.

Here in fact, it is not rare to find beneath a layer of clay or sand, that black and bituminous earth which the inhabitants employ as firing. In digging canals or laying the foundations of houses, veins of this combustible which has been buried for centuries are daily laid bare. A few feet from the surface the peat makes its appearance, and at some spots it reveals itself by the inconsistent nature of the soil. The elastic, water-swollen earth yields under the foot that presses it, and then rises again. This quivering sensitive soil is known to the inhabitants, who say of it, *Het land leeft*—the land is alive.

The extraction of peat supplies labour for thousands of arms. Nearly the whole population of Holland warms itself with the earth; but how many live by it! The mode of warming is akin to the manners and domestic life of nations; a friend of Walter Scott told us that he had often heard the celebrated romancer repeat, "Tell me how a nation warms itself, and I will tell you what it is." The ancients thoroughly comprehended these relations, for they made the hearth the religious symbol of the family. With admirable good sense, they placed the gods in that part of the house round which the tenderest affections of the human heart are concentrated. The chimney nook is in all European nations the seat of intimate relations; but it is before all, in the life

of Northern peoples, that the hearth plays a principal and delicate part. There man, obliged to produce light and heat, has placed in his daily task a spark of those feelings which render existence poetical.

To winter evenings are attached the sweetest memories and most touching pictures of domestic felicity. The grave features of the grandfather, the ruddy cheeks of the children, the furtive smile of lovers—all these receive a sacred illumination from the light of their artificial sun. The comfort of the hearth, contrasting so strongly with the severity of the atmosphere and the rigour of the climate, contributes to the development of domestic life in the north. In Holland, that country where everything is peculiar, the firing could not resemble that of other nations. Virgil, that great painter of rustic manners, has noticed how much there is interesting and poetical in the smoke that rises towards evening from a cabin. In the Netherlands, the chimneys smoke more than elsewhere. How often have I stopped on the interminable plains of Drenthe and Over-Yssel to watch the thick white clouds which a modest peat-fire sent sky-wards! These clay or turf roofs, thus draped, caused me to dream of all the tranquil joys of nature; for the smoke that rises at eventide to heaven may be called the prayer of the house.

A relationship may even be traced between the

nature of the combustible and the character of the Dutch. The best peat catches light with difficulty, and the stranger whose limbs are stiffened by cold, can scarcely endure the slow progress of the fire. Hence more than one person has seen in this slow combustion an image of Batavian patience, *Hollandsche patientie.* The peat takes fire with difficulty, but once that it has caught, it holds the fire for a long time; another symbol of the character of the inhabitants, which is not inflamed very rapidly, but keeps up its enthusiasm for a lengthened period.

The use of peat is very ancient; it goes back, according to all appearances, to the earliest times of the country being inhabited. The necessity to which the Batavian people were reduced of burning their own ground, drew a complaint and a sigh from grave Tacitus. Pliny admired the industry of these nations which, through the absence of wood, took earth in their hands, and with this earth, dried more by the wind than the sun, prepared their food and warmed their entrails stiffened by the northern frost: *rigentia Septentrione viscera sua urunt.* Extracting peat and employing it as firing, was an art known to the Dutch from the most remote period; but what is relatively new, is the improvement of that material by technical processes. In the infancy of the trade, the inhabitants extracted the peat in clumsy lumps and

burnt it after drying. Tradition refers the method of making and preparing peat to the peasants of Holland and Friesland, who, about the year 1215, discovered the means of improving this gift of nature. Such an invention spread at once; and by the end of the thirteenth century, lumps of peat of a regular shape were very generally sold in the Netherlands. The shape, by the way, has changed during the historic age. We saw at the Town House at Leyden, pieces of peat taken in a hut belonging to the enemy, during the siege of 1574, which are regular cubes, while the present form is that of an elongated parallelopiped.

The Dutch are not agreed among themselves as to the etymology of the word by which this combustible is designated in their language, *turf* or *torf*. Some derive it from the old word *dorst* or *durst*, signifying poverty, doubtless in allusion to the penury of wood against which the fossil earth is called upon to act. This idea of poverty, it must be allowed, agrees with the sadness of the hearths fed with peat. This combustible, unhappily, does not give the cheerful flame of wood, nor the red light of coal; peat whitens rather than illumines. Round these gloomy fires, which are most frequently shut up, you do not see the familiar spirits of the house dancing on the walls, as is the case with wood fires. Still peat, if it does

not give the sparkling brilliancy or heat of other combustibles, is not the less a considerable resource in a country where nature has given everything, not for man but against him. The consumption of peat is considerably increasing in the Netherlands; it amounted to 22,275,623 tons in 1834, and to 33,943,630 in 1852. These figures are sufficient to prove the importance of the works connected with the peat-beds.

These works are interesting from three different points of view:—The economist likes to follow the extraction of the peat, the preparation and industrial and domestic uses of the combustible, and the relation in which the peat-beds stand to agriculture. The geologist seeks with curious eye the origin of the peat, the formation of this recent soil, and the monography of the strata in which the works of man repose. Lastly, the travelling moralist cannot refrain from noticing that this trade has given some singular traits to the population of the provinces in which the peat-beds are now found most abundantly, namely, Friesland, Drenthe, Groningen, and Over-Yssel. The manners of the inhabitants of these provinces, and in particular the life of the workmen who work in the peat-beds, are worthy of examination.

The extraction of peat varies with the nature of the beds, and we may form two great divisions according as they are high or low. We will first

direct our attention to the high peat-beds (*hooge veenen*).

Assen is an unfortified town, new, quiet, and well lighted, where the States Provincial of Drenthe hold their sittings. An official world of employés and magistrates reside there; pretty houses, standing here and there as if for their private amusement, do not appear at all anxious to form streets, while clumps of trees, gravelled walks, and patches of grass, connect by a belt of verdure the Town House, the Hall of Justice, and the Reformed Church. In the vicinity are delightful country villas, and by their side extend gardens or prairies which a quarter of a century ago were peat-beds. A great number of these are still worked; they communicate by private canals with a central canal that connects Assen with Meppel, and on which the sails of the heavy barges carrying the peat are expanded. Situated in the midst of perfect steppes, on which grow heath and other wild plants, the high peat-beds—a name they owe to their higher position and relatively dry nature—constitute the principal, we might say the sole, wealth of this province, which cultivation has not yet enlivened. When the sky is red with sunset, these open trenches in a black earth; this soil devastated to a certain depth by the pick; this pile of bituminous stuff, drying in the wind; the shadows of the

workmen, which lengthen in the twilight—all this forms an abrupt and stern landscape which the pencil of Salvator Rosa would not have disdained. We may as well visit the scene of these works, for we shall thus be better able to follow the various transformations man's hand imposes on raw and sterile matter, in order to render it capable of performing industrial and domestic services.

When the owner of a peat-bed has resolved upon working it, he must in the first place drain the ground of the water, which impregnates it like a sponge. The workmen sometimes fasten to their feet wooden apparatus of variable sizes, which are called in Dutch *bredden*, and which guard the poor fellows from being swallowed up in the marshy soil. Once the surface of the excavation has been traced, trenches (*wallen*) are formed at a distance of about four-and-twenty feet from each other, and with a depth of three or four feet, which are frequently lined with an earth wall to prevent the peaty matter from falling in. The depth of these trenches is gradually increased, and it generally takes eight years before the peat can be attacked. Removing the water by skilful and methodical tapping constitutes a real science. The water is collected in trenches, kept in by sluices, and conveyed by pipes to the canal which is destined to transport the combustible.

The field being thus prepared and the water drawn off, the extraction of the peat matter is proceeded with. Division of labour is the fundamental principle of all industry. The workmen are distributed in gangs of six or seven men, but the duties they perform may be divided among four. A first workman divides the surface of the peat-bed with a sharp instrument called in Dutch a *stikker*. A second workman, with that certainty of eye which practice gives, lifts the cut sods with a little spade. A third workman receives from the second the divided glebe, which he pricks with a species of fork and deposits in a wheelbarrow. This barrow is wheeled by a fourth man to an open part of the field, where the sods, still saturated with moisture, are piled. There is a knack in upsetting the barrow, so that the pieces of vegetable mud may be arranged in a species of wall, without touching them with the hand. The peaty matter is, in fact, so soft and sensitive, that it retains the mark of everything that touches it. We may observe that the peat-sods are at this period of a much larger compass than they are when reduced by drying.

The extraction of the peat is succeeded by the drying process, and this is an important part of the trade now occupying our attention. At the moment when it leaves the ground, saturated with

water, the peat is absolutely useless for burning. This soft matter appears, through drying, to assume a fresh nature, and becomes combustible. We left the pieces of saturated peat piled on the field. So soon as they have acquired sufficient consistency to be handled, they are arranged with singular art so as to be exposed on all sides to the sunbeams and the influence of the wind. The workmen form mounds, being careful to lay one sod sideways on every two bricks, much as the moulder lays the bricks and exposes them before baking. The field then displays symmetrical rows of squares, with small paths between them, along which the women and children, employed in preference for this work, walk. Each piece is moved several times, so that the air may play freely over all the surfaces of the peat. When the top sods begin to dry, they are placed at the bottom, and those are raised which contact with the earth has prevented from obtaining inflammable qualities. If the wind blows from the east or north, the peat very speedily gets rid of its inherent moisture; but if the sky is rainy, as is too often the case in the months of April and May, it offers an obstacle to the preparation of the peat. We have seen the hopes of an abundant industrial harvest destroyed by continued rain.

When, after having been several times moved, the lumps of peat have attained the necessary stage

of dryness, they are formed into large square or round heaps, which are covered with reeds, hay, or straw, to defend them from the rain and frost. They are placed also in sheds on laths or planks, so laid that the wind can freely circulate through them. The peat does not leave these sheds till it is transferred to the long barges that carry it to market.

When all the peat is extracted, trees, generally belonging to the pine family, are found at the bottom of the bed. I had an opportunity for inspecting heaps of this wood, which had been thus buried under the stratum, and whose substance was hardly at all altered. The resinous branches of these pines serve as torches to illumine the winter nights. Enormous stems, slightly blackened, are also sometimes dug up, which may still be employed for industrial purposes. This is also the period to say a word about a light, porous substance, which acts as a roof to the peat-bed, and which was at the outset thrown away by the workmen as unfit for burning. This upper crust is now about to play a part: when mingled with sand it will become the basis of the arable land in which potatoes or wheat are grown. It is interesting to see thus, by the side of the peat-beds which are in full operation, others which have been exhausted and at once converted into a fertile field.

One of the dangers incurred in extracting peat,

is setting fire to the peat-beds. At the works lighted coals are generally kept for domestic purposes, and they may become the cause of great misfortunes. Not only the peat extracted and exposed to the air, but also the marshy soil which is drained by the preparation it has undergone, is susceptible of being fired. The fire, in such cases, spreads dully, to the great injury of those who live by the peat-beds, and the great terror of poor persons who dwell on an inflammable soil, for at any moment their cabins may be reduced to ashes. There are instances of fires that have lasted there for from 12 to 14 days; the earthy matter burned slowly, and the flame incessantly finding nourishment, advanced under the effect of the ravages it committed. The sad and lamentable sight of a Vesuvius was there offered on a flat soil. These fires in the high peat-beds would last not merely for days, but for months and years, if means were not sought to check their progress. In burning coal-mines, the flames are drowned, but here the employment of water, which besides is not always ready to hand, would prove but a poor defence. The only mode of stopping the progress of the scourge is to dig up the surrounding land, and in this way the fire is imprisoned in a circle, when it must exhaust itself.

History has preserved several instances of burnt peat-beds. In Friesland, not far from the Zuyder-

zee, you are shown a rather deep lake called the Jonker Meer. Tradition has it that in olden times this lake was a high peat-bed. The carelessness of a workman, who was warming himself, produced so tremendous a fire, that all efforts to suppress it were in vain. The peaty matter was entirely consumed, and the waters gradually collected in the vacant space, and thus in time a lake was formed where sheep had formerly browsed.

Such accidents have not always been the result of negligence. In 1593, the Spaniards had formed near Schoonebeek a road by which to cross the marshes. The Dutch tried to stop their passage by hurling on the road trees they extracted from the bottom of the peat-beds. They collected these trees into piles and fired them, but, as the atmosphere was dry, the flames penetrated the ground which was rich in combustible matter. The fire reduced all the peat to ashes; it hollowed gulfs and ravines, and the road became impracticable for the hostile army. This perfectly novel defence doubtless originated the infernal idea which was attributed to one of the agents of Philip II. Having heard that the soil of the Netherlands burned, he resolved to destroy this rebellious country by fire. He did not abandon his plan till he learnt that a portion of this inflammable earth was buried under water, and that the rest (the high peat-beds) could be defended against fire by the spade.

We have seen this peat extracted from the high beds, and we must now study another system of working, that of the low beds (*lage veenen*). In these the hand of man seizes the earthy matter which will serve him as a combustible under water.

In South Holland, a few leagues from the Hague, is the village of Wateringen. Gardens intersected by small canals, wooden bridges leading to paths covered with fine sand, fields artistically cultivated, houses, which fruit trees enfold like a garment, a pretty school, two churches—one Catholic, the other Reformed—a mill quite proud of its large wings and gilded axis, form what the English call a secluded spot. By the side of this village extend the peat-beds.

The difference between the high and low beds is that, in the latter, as soon as the ground is opened, water is found. In olden times, barren or nearly barren land was used for the purpose; but ere long the inhabitants, led astray by the profits produced by the peat trade, destroyed fertile plains and fields annually covered with abundant crops. Holland thus lost some of her territory daily, and at certain points the excavations even weakened the dykes raised to defend the country against the impetuous attacks of the sea. Holland at that time offered the astounding spectacle of a people already enjoying a very limited territory, and yet

incessantly working at its destruction. The finest fields man's eye had ever surveyed disappeared, and the government of the country thought itself bound to set limits to this devastation of the earth. Henceforth no one was allowed to dig up his field, save under certain conditions, and not till he had obtained the consent of the magistrates. Decrees to this effect were published at various periods, but for all that the State did not dare to restrict the abuse sufficiently, interested as it was itself in the ravages of the soil, through the profits it derived from the peat-beds in the shape of taxes.

The permission to dig the earth being obtained, men armed with spades are led to the scene, whose employment it is to remove the bed of clayey earth which serves as a covering to the peat. The proprietor then divides his peat into several long strips of earth, which will be worked in turn year by year. The strip which is selected for the first attack, and which is generally situated at the extreme end of the field, is still covered with grass and plants; but this verdure soon disappears before the tools: this is what is called "beginning the trenching." At Wateringen, the peat matter is found under a stratum of clay two or three feet in thickness. This arable land is carefully removed with the spade, and deposited in another part of the field: when the peat has been extracted and the water drained off, it will become the basis of

fresh cultivation. This preparation is a winter job; the land is dug up and the bed of peat is laid bare to be worked in the following spring. A new series of operations ordinarily begins in April or May, and terminates about September. A workman dressed in long water-proof boots descends into the water, the presence of which is immediately revealed under the bed of clay. Armed with a spade, peculiar to this nature of work, he extracts the peat earth. This man does not see what he is doing: he feels his way, for the surface of the water completely conceals the peat-bed. After cutting the earth, guided by that mental eye which habit creates, he seizes the divided sod by pricking it with his spade, turns it over, and throws it into a barge. Five or six times daily, this barge, old and clumsy as Charon's, is filled with the sods the man throws into it. The peat, at the moment of its leaving the water, is of the colour of tobacco; it is mixed with roots and rotten branches of trees. The barge is at once steered to land, and the peat is discharged into a wooden trough. This trough, nearly square, about twelve feet in circumference and two in depth, receives the peaty matter which has to be mixed and worked up. A workman crushes with his feet the shapeless and compact sods which the spade has cut, while he simultaneously frees them from the large roots, stones, and other impurities that vitiate it. In the trough, this combustible

paste is kneaded like dough by the baker's hand. When this is effected, the peat is thrown in lumps on the ground, and is covered with a layer of dry reeds intended to isolate the bituminous matter.

Four or five hours are allowed to elapse before proceeding to level and mould this liquid peat. When it is sufficiently dry, a workman fastens a little plank to each foot, and thus equipped, treads down the soft matter, whose surface soon becomes perfectly smooth. This task is fatiguing; and we admire the art with which the workman, by the mere way of guiding his feet, forms a square with sloping sides. When the peat has been thus manipulated, it is again left to dry; then, with the help of an instrument that bears some resemblance to a rake, as it is provided with regular teeth, lines are drawn indicating the future form of the slabs, and the bed then presents the appearance of a chess-board. This task is succeeded by that of the *turf stikker* or *riemer*. Armed with a spade, which he digs in vertically in the direction of the already traced lines, he divides into pieces the matter which, when properly dried, will presently serve for firing. The system of desiccation in the low peat-beds does not differ from that practised in the high beds. Women, and children of ten to twelve years of age, are employed to turn over the sods exposed to the atmosphere. It generally takes three months

before the sods are dry, and during the busy season, one hundred and forty workmen are employed on one bed at Wateringen. All these men are on piece-work, and the cleverer of them earn 1 florin 50 cents a day, or about 2*s.* 6*d.* A day's work begins at two in the morning, and lasts till five in the evening.

When the low peat-bed is worked out, what remains is water. The sight of these gloomy lakes succeeding green fields, saddens the eye of the agriculturist. This change was even most dangerous to the population in olden times, and the inhabitants of these fields converted into lakes, pressed by hunger, emigrated to other districts. Still, these lakes did not remain barren; some landowners converted them into ponds stocked with excellent fish, that supply food for many families, and create a new source of productiveness. With the art of pisciculture and the volume of water she has at her disposal, Holland possesses the means to increase on a grand scale the field of living wealth. Formerly the lakes formed by the extraction of peat, remained in that state till the day when a daring speculator took it into his head to drain them. The proprietors of the inundated domains disposed of them at a low price, and when the purchase was effected, these lakes were surrounded with strong dykes to keep out external waters, and by the help of mills, they were often

dried up within a year. The bed which originally served as a base to the peat then appeared; it was sometimes clay, sometimes sand, and frequently a spongy, light layer of reeds, which the Dutch call *darri*, and which was removed with drags.

The peat being extracted, and the waters pumped out by mills, certain barren districts were often converted into land of prodigious fertility. The old removed surface had, in fact, made room for a very rich clay substratum, very well adapted for producing flourishing crops. These regenerated fields thus emerged from the depths of the ground, and districts lost to agriculture, after the removal of the peat, were restored to the plough. Such a method, however, did not fail to entail private misfortunes by the side of its general advantages, and many persons were ruined. The sight of these miscalculations caused an old economist to say, that if he had his hands full of gold he would not open them, were a proposal made to him to build houses, dry peat, or drain lakes. The Dutch fortunately have not followed this advice. The same field converted into a peat-bed, then changed into a forest of fallen trees, and lastly a pond, produced them, under different shapes, a profit with which they had every reason to be satisfied. At the present day, people are glad to drain the water off the low peat-beds so soon as the extraction of the peat is finished.

These fields or prairies, delivered from the waters that covered them, do not the less remain subject to repeated inundations in the rainy season. It is therefore necessary, even after draining, to provide them with mills which work to keep them dry. The maintenance of the mills, and the men who set them going, is a considerable charge, and we must not feel surprised, therefore, that in Holland, where agriculture can only defend itself by artificial means against an ever-present enemy, the price of cereals and other objects of consumption should be relatively high. There is also another source of danger; the low soil of the Netherlands is daily rendered lower still by the works carried on in the peat-beds; and if the sturdy dykes built against the high tides were to give way, and the sea seize on these farms, situated several feet below its level, the disaster would be terrible and irreparable. It would require at least years, and prodigious efforts, to restore to light these swallowed-up fields.

We have seen the peat extracted and prepared in the high and low beds, and we have now to follow it to market. The waters of the Waal, Leck, and Meuse are perpetually furrowed by long boats, which the Dutch call *same reusen*, and which transport the combustible material. Other boats of larger size, built in the provinces adjoining the peat-beds, navigate the canals of Friesland, Gro-

ningen, and Over Yssel. Several of them even cross the Zuyderzee; they are known by the name of *turf potten.* Their shape is ancient and historical; for it was in similar boats that the Dutch defeated the Spanish fleet in the gulf. The boatmen live all the year round with their families in these wooden houses, and transport their affections, manners, and domestic hearth from one place to the other. On reaching their destination, the peat is unloaded by porters, or by the boatmen, and sometimes even by women. It is an interesting scene, and it is curious to see how regularly the squares of peat are arranged in these floating storehouses. The mode of construction resembles that of a house covered with an angular roof. Two men in the boat fill baskets, which they pass to two other men and two strong women standing on the quay. The peats are then thrown into a wooden measure, generally containing from 36 to 37 heavy sods for the factories, 48 to 50 light or blue peats, or 80 of inferior quality. The number depends besides on the manner in which the peats are thrown; and, in spite of the most scrupulous attention, one-third of the measure is generally left unfilled. The peat is then loaded in hand-carts of a clumsy and singular form, which are a reminiscence of the foreign domination. According to tradition, the Spanish munitions of war were brought into Holland in carts of the same shape,

though larger and drawn by horses. It is permissible to repair this old material, but not to build new vehicles on the same model.

The corporation of peat-porters constitutes a separate class in the towns; it has a commissioner, regulations, and privileges. In public ceremonies and at great national festivities the peat-porters get up masquerading processions of their own, which are not without character. They are forbidden, under a penalty of three florins, to smoke while loading or unloading the barges. It is seen, then, that the extraction, transport, and sale of the peat have produced a numerous and most peculiar *personnel.* At times the heaviest lighters, whose decks were only a few inches above the water's edge, are emptied in two days, and an old woman prepares in the cabin the coffee and food needed for the poor fellows after their labours. The boatmen are dressed in short canvas blouses; but in the rainy season these are made of a yellow, oily, impermeable material, resembling oil-skin. When the peat is unloaded, the boat's toilet is performed; for, like riders who take no rest till they have looked after their horse, the boatmen do not sleep till they have washed down the flanks of their colossal steed with abundant buckets of water.

The quality of the peat varies singularly; there is some more or less rich in woody matter, porous,

compact, heavy, or light. These varieties correspond with the different industrial and domestic wants. Dutch housekeepers recognise at once, by the colour and shape, the properties of this combustible. There is a species of peat suitable for the kitchen, another for the drawing-room, and a third for parlours. Generally, the produce of the low beds is preferred to that of the high. The bakers bake their bread with loose sods, that easily take fire; and peat is employed to keep going limekilns, breweries, distilleries, oil-mills, and tileries. From Zwoll to Arnheim we counted seventy brick-kilns, which turn out bricks by millions, and are all heated at the expense of this earth consecrated to Vesta. The consumption of peat in the factories has greatly increased in the Netherlands during the last eighteen years; and it now amounts to twelve million tons. The consumption of coal in the same period has risen to one and a half million hectolitres, whence it results that the progress of the peat trade has been fifty times more active than that of the coal trade.

It will be as well now to establish the calorific relations between the two combustibles. Coal evolves twice the heat of peat; but if two bushels of peat produce the same effect in a stove as one of coal, the peat costs, all proportions being maintained, much less than the coal. There would be consequently a saving in employing the com-

bustible produced in Holland. Moreover, we may see for the use of peat more than one economic reason; we may discover in it a question of great political importance for the Netherlands. By the employment of coal or coke, the manufactories, railways, navigation, and drainage of the Netherlands become dependent on the foreigner. Peat, on the other hand, is an element of national independence; and hence the Dutch are bound to seek the means of producing steam, that is to say motion, in the combustible nature has given them.

The bulk of the peat has hitherto been an obstacle to the employment of this material in extensive works and the public service. Peat occupies three or four times as much space as coal. More or less ingenious methods have been tried to overcome this obstacle, and establishments have been founded for compressing peat; 30,000 kilos of peaty substance from the high beds can be reduced to 5000 by condensation, and they have gone even further still, for the compressed peat has been transformed into charcoal. I visited one of the establishments where a new species of coke was produced, and the appearance of these lumps of carbonised peat was certainly that of the combustible material whose colour they had. From 2000 kilos of condensed peat, 1000 of charcoal are obtained. These industrial attempts are very curious as experiments, but hitherto the profit has

been problematical. The peat, although manipulated and remanipulated by the hand of man, has not yet been able to compete with coal in the production of steam movement. The steamer on board which I crossed the Zuyderzee from Zwoll to Amsterdam was, however, fed with common peat. I silently observed the prodigious quantity of material the stoker took up with a spade and threw into the furnace. The boat went at a good speed, but I soon convinced myself that this combustible, owing to the space it occupies, is unfitted for long voyages.

If peat cannot sustain the rivalry with coal in the matter of engines, this earth, so susceptible of catching fire, has been for centuries the sole, or nearly the sole means of firing for three-fourths of the Dutch population. Peat charcoal has even given rise to the thoroughly national custom of the foot-warmer. During winter, women in their apartments, and even at church, have under their dress a warmer filled with peat. I was surprised to see at Leyden, in one of the rooms attached to the great church, three or four hundred *stoven*, intended for the Sunday service. This domestic habit is not irreproachable from a hygienic point of view, as it is accused of rendering the most ruddy-complexioned ladies sallow. The smell of the peat goes to the head, and this combustible evolves a powerful sulphuric vapour, which,

in certain localities, renders the inhabitants pale as ghosts. If the carbonisation of peat had only the result of removing this disagreeable and injurious smell, the artificial treatment ought to be encouraged.

It is the economic principle of the Dutch to utilise everything they come across; hence they have laid under contribution the ashes, soot, and smoke of peat. These ashes fertilise some lands; while other portions of the Netherlands reproach themselves with having overlooked the fertilising qualities of this manure, and abandoned to Flanders one of the richest principles of cultivation. The soot is employed in some households to clean steel or tin instruments, while the smoke is used to prepare salt meats and those millions of herrings which the coast fishermen draw into their nets. Peat has not only been used as a means of warming, but also lends itself to various branches of trade. The peaty substance can be applied to gas-lighting; it supplies a basis for the manufacture of paper, ink, varnish, and animal black, especially for the refineries. In marshy districts peat is employed to lay the foundations of houses. The bricks and other masonry work are laid on a primary bed of lumps of combustible earth, arranged in the shape of a pyramid. This peat swells under water, and thus forms an invincible foundation which the damp does not destroy. After

centuries, when the house has fallen through decrepitude, the peat is found to be as good as on the first day, and still fit for firing. Among the services peat has rendered the Dutch, there is one which history is bound not to forget. The town of Breda was occupied by the Spaniards. A Dutchman, Van Bergen by name, whose trade it was to transport peat by water, conceived the daring plan of delivering the town. This plan he communicated to a military chief, who supported it. Peat is patriotic; it forms part of that old Dutch land whose very entrails rose against the foreign dominion. As such it was bound to protect a stratagem intended to rescue the national independence. On March 4, 1590, these Spaniards, seeing a boat coming with ammunition against the winter, welcomed it with shouts of joy, and as the port was covered by a slight crust of ice, they dragged the boat, and helped to carry it into the citadel. This barge was neither more nor less than a Trojan horse: about midnight it was delivered of ninety brave and enterprising men, who, hitherto concealed under the cargo of peat, emerged under favour of the darkness; they surprised the enemy, cut them to pieces, and restored Breda to Prince Maurice.

The material extracted from the Dutch peat-beds has been employed for centuries for various industrial and domestic uses; the peat fire had

illumined and warmed, during winter nights, the meditations of poets, the joys of a first love, the labours of a family, long ere the nature of the present made in the night of ages to the soil of the Netherlands was properly understood. The moment has now arrived to ask ourselves the question, What is peat? whence does it come? what is the origin of this burning earth? We must have recourse to the lights of science if we desire to penetrate the mystery of this formation. The study of the circumstances under which peat was formed is connected with the ancient geography of Holland, whose principal features can only be thoroughly learned by an examination of the peat-beds. Even if this old constitution of the soil be effaced, the relations between the primitive state of things and the industrial wealth of the country remain, and will remain for a long time yet, visible.

## CHAPTER VIII.

ORIGIN OF PEAT—DRIESCHIGT WOOD—ANTAGONISM OF VEGETATION—BURIED WOOD—DESTRUCTION OF FORESTS BY WIND—THE AQUATIC FLORA—FORMATION OF LOW PEAT-BEDS—FLOATING ISLANDS—PLINY—A CURIOUS LAW-SUIT—INFLUENCE OF THE SEA—SUBMARINE FORESTS—PEAT-BEDS IN THE SEA—ORGANIC REMAINS—THE BEAVER—HISTORIC FOSSILS—THE BRIDGE OF VARUS—AGE OF THE PEAT—ITS PROBABLE DURATION—RELIGIOUS IMAGERY.

PEAT is not a substance created from the origin of things and immutable, nor is it pre-existent: it was not made, but made itself. This land is formed and composed even at the present day before our eyes. As peat is a land that grows, this very growth has been variously explained. Some visionaries have referred the formation of the peat-beds to the influence of the planets. The relations of the worlds to one another are not known to us: in the present state of science, it is as imprudent to affirm these relations as to deny them; but, at any rate, there is no reason why the light of the heavenly bodies should act more on the peat than on the other strata of the earth.

Other naturalists have asserted that this combustible material was not produced in the soil of Holland, but conveyed to it from Norway, Sweden, and other regions of the north, by great deluges. This explanation removes the origin of peat further back without giving a solution. We know, moreover, at the present day, that the existence of peat is due to the decomposition of certain vegetable matters growing *in situ*, which an excess of humidity prevented from being converted into humus.

In the history of the works employed in the extraction of peat, we distinguished the high from the low peat-beds; the same division must be made in the history of the natural events that preside over the formation of this terrain. The forest is the matrix of the high peat-beds, water is the origin of the low beds.

Numerous historic documents attest the presence of gloomy and impenetrable woods on the now open soil of Belgium and Holland. Several villages in the Netherlands still bear the names of ancient forests that no longer exist. We have no need, however, to go back to the old history of the Netherlands to find the origin of the high peat-beds in the presence of the forests. In the province of Over Yssel, not far from Almelo, there is a wood (the wood of the Drieschigt), in which I saw, so to speak, the peat forming under the naked

eye. Half copse, half peat-bed, this melancholy wood constitutes a new genesis—the genesis of the present phenomena of creation. The limit between a part of the vegetation which is decaying; the passage of the living wood into the peat stage; the different phases of this more or less rapid operation; the labour of the slow chemical agencies by which vegetable matter is transformed into a species of growing land—all this justifies the idea of the ancient peoples, who placed in the forests of Gaul and Germany the sole worship worthy of divinity.

The natural history of this metamorphosis demands our attention. Some botanists have remarked recently a relation between certain large trees and low plants, which grow on the surface of the ground. The antagonism between these two systems of vegetation is speedily declared: with time the heaths and mosses devour the forest; the beech-tree is conquered by the blade of grass. The natural formation of peat is allied to this continuous development of heather and moss. These plants die annually, but in dying they deposit their vengeance on the soil, if we may employ the expression. The mechanism by virtue of which the vegetable matter acquires the proportions of peat is remarkably simple and ingenious. The lower ends of the stem are annually detached from the dying shoots, and their fall

gives rise to a peculiar mould. This layer, formed of vegetable detritus, rises slowly, while the moss continues to grow upwards. Time gradually developes these inexhaustible fecundities of life and death. Vegetable generations are thus piled up on generations, spoils on spoils. The forest, half wood, half peat, then offers the image of those Egyptian catacombs in which the living grew on the dead. The great trees send down their roots into those gloomy galleries, where the ancestors of the vegetation, accumulated strata on strata, repose. This period of the growth of the peat marks more and more the period of the decrease of the wood. The peat which is attached to the forest, like the mistletoe to the oak, gnaws at it silently. Choked by the heath and mosses which swarm at their feet, undermined by the peat which they daily increase with their ruins, the great trees fall. When the trees have disappeared, the heath and mosses continue on the surface of the peat-beds the slow, silent work of decomposition, which must necessarily augment the mass of combustible matter. In the midst of these empty plains, whence the primitive inhabitants, that is to say, the oaks, the beeches, and firs, have disappeared in turn, man undergoes an indefinable feeling. His mind is elevated by the sight of the economic system of nature, which makes everything contribute to the utility of man, even to the quivering of the blade of

grass which the wind detaches from the stem, and which falls preciously into the darkness of the peat-bed.

Even if the wood of Drieschigt did not exist, to betray the secret of nature, the influence of the ancient forests on the formation of peat would be attested by the multitude of trees still found daily beneath the high beds. In some parts of the Netherlands, the inhabitants burn the buried wood thus restored to light. These trees are found preserved like mummies in the bituminous substance. Some travellers tell us that the degenerate sons of old Egypt burn on the desert the embalmed bodies of their ancestors to cook their food; and the Dutch peasants in the same way give to the flames the ancestors of the soil—the oaks, and beeches, and pines, the primitive inhabitants of the Netherlands, which the occupation of man expelled. These trees are still at the bottom of the peat, and rest most frequently on sand, whence their branches rise in the bituminous mass. The presence of these trees assuredly testifies the existence of an ancient forest; but we have still to discover the nature of the event which levelled and hurled them to the bottom of the marsh. Some attribute this disaster of vegetation to fire; others to a deluge, an earthquake, or some other convulsion of nature.

The imagination of geologists has made an

abuse of these violent and perturbing causes. It is easy to explain the presence of these trees at the bottom of the peat-beds by phenomena which are simpler, and more in conformity with what still takes place before our eyes; they were overthrown by the wind. Examples of such ravages are not rare in the present day in Holland. In this more or less boggy soil, the trees spread out their roots rather than bury them, and the result is that they take no hold at all on the soil. It is hardly possible to believe, in fact, with what facility they are overthrown. I frequently saw in the high roads large trees supported by props. The owners, who are acquainted with the nature of their property, believe this precaution necessary to protect them from a fall. The strongest and most deeply-rooted trees, moreover, would not resist the impetuosity of the winds blowing off the sea; and hurricanes which cut churches asunder, as was the case at Utrecht in 1674, do not spare oaks.

It is in these ordinary facts, well known to the Dutch, that we must seek the explanation of the geological phenomena. It has been observed that the tops of the trees lying in the peat-beds are most frequently turned to the south-east. This circumstance sufficiently indicates that they were levelled by a gale from the north-west. That is, in fact, the one which causes the greatest injury in

Holland. Such a direction, however, is not universal; for on trees turned that way are found other stems lying in the opposite direction. These trees, hurled down by winds blowing from various cardinal points, formed the base, the bed, or, to speak more correctly, the flooring of the high peat-beds. It may be asked whether these buried trees have become incorporated with the peat, and experiments show that it was not so, as they are found intact, and in a perfect state of preservation. At the most, the roots and leaves may have been, in certain cases, converted into peaty matter. This intervention, however, has been only accidental and quite secondary; the peat substance has been almost entirely supplied by the decomposition of heath and moss. Hence, we must not confound the part played by the two systems of vegetation. The forests enveloped and protected the germination of peat, but they did not create it.

If the forests favoured indirectly the growth of the high peat-beds, the medium in which the low beds were formed and developed, is water. The existence of inner lakes that covered the soil in olden times is no less proclaimed than that of the forests by geographical memorials. *Moer*, in the language of some Dutch peasants, indicates at once a sea and a marsh. Tradition, in fact, asserts that the Netherlands are the daughter of a pool of water, and this origin is attested by history, and by a

view of the country. Latin geographers, who wrote of the Holland of their day, doubted whether this country were land or a morass. Vegetable life did not fail at that period to seize on these stagnant waters; the aquatic plants, eager to spring into life, as the ancients said, must have peopled the solitude of these pools where nothing opposed their growth. We can form an idea of this wild profusion by what goes on at the present day. In some ditches, the water is covered with a crust of moss,—a perfect microscopic forest. This moss has even become in Holland the source of a productive trade; it is removed by means of barges, and sold to foreigners. The waters, freed from this greenish surface, covered themselves within a few weeks with fresh vegetation, and the crop could be gathered several times during the summer. To the mosses is added the no less exuberant population of reeds and rushes, which form perfect thickets. Cleansing the waters is a continual occupation and expense for the owners of the polders. If this vegetable wealth is now so prolific in spite of man's hand, what was it, we ask, when the waters, left to themselves, enjoyed a tranquillity that no longer exists? Not merely does the presence of man destroy the parasitic marsh plants, but it also destroys the circumstances in the midst of which these plants prefer to develop themselves. Navigation and fishing have changed the conditions

of nature, which was formerly at liberty to act as it pleased.

Although the low peat-beds have all been formed in lakes or ponds, there are different systems of formation, according to the depth of the water, or the nature of the aquatic or marshy flora. In shallow water the peat was engendered directly by the decomposition of the reeds, rushes, and mosses; but in deeper water the process of formation was necessarily more complicated. Submerged plants, with tall stems (among them the water-lily), began by raising their broad leaves to the surface of the tranquil lakes. Dying at the close of autumn, these plants fell to the bottom of the water, where they gradually formed a layer of vegetable *débris*. When this layer was impregnated with roots, it became lighter than water, rose, and reached the surface of the lake. A floating turf grew on this floating soil, reeds and rushes were developed on it, and the original bed of the lake or marsh was thus transformed into a meadow, on which a luxuriant grass grew. It was then that the fibrous plants appeared; moss covered the earth, and annually added a stratum to the formation of peat. With time, alders, birch trees, and a species of willow (*Salix caprea*) which never exceeds the proportions of a shrub, sprung up. The existence of these floating islands has been doubted by the moderns, who seeing nothing

similar formed in present nature, have considered the narrative of the old geographers as fabulous.

Such statements, however, are so little fictitious, that you may see in our day not far from Giethoorn, land half meadow, half peat-bed, floating on an old lake. The prairies are mown every year; alders twenty feet high grow in the moving soil, and their roots penetrate to the water which supports the field, trees, flocks, and inhabitants. The cattle traverse the vacillating ground in freedom; there is no fear of their being swallowed up, for the instinct of self-preservation makes them distinguish and avoid dangerous spots. These floating pastures rise or sink with the water, and in summer they are sometimes deposited on dry land like a stranded vessel. In seasons of great drought, it will happen that the plants, especially the trees, thrust their roots into the bed of the dried lake, and attach themselves to it. This circumstance is greatly feared by the inhabitants, for when the waters swell, the prairie does not rise again. Fastened to the subsoil, it is then converted into a marsh, over which reeds and rushes grow, and it takes years before the surface, gradually raised by vegetable mud, is again covered with new pasturage.

The presence of floating land has more than once given rise to natural facts, which possess all the poetry of the marvellous. Islands of peat,

hitherto tranquil, have been seen to move, cast themselves on adjacent fields and swallow them up. Pliny describes to us the terror of the Romans on seeing floating forests sailing toward them during the night, on the two lakes which eventually formed the Zuyderzee. These forests, standing on dissevered islands, moved at the mercy of the waves, and threatened the Roman galleys stationed on the lake. The naturalist tells us that it was found necessary to fight a naval action against the trees. Pliny has been accused of romancing, but in this case he was merely an historian. During the inundation of 1509, a field on which ten or twelve cows were feeding, was carried from one side to the other of the Dollart, in the province of Groningen, and attached to the Reinderland, after crossing the gulf, without the loss of a single inhabitant. This displacement even gave rise to a singular lawsuit between the owner of the prairie and the proprietor of the estate on which it was cast, for each claimed the ground as his property. Such alarm was felt about these irruptions of isles, floating like rafts and destroying everything before them, that in some provinces of the Netherlands the peasants held their fields together with strips of land, just as a halter is fastened round the neck of a dangerous animal. The existence of these floating peat-beds was the origin of a curious trade. In olden times people did not always take

the trouble to extract the peat *in situ;* they at most contented themselves with cutting away, by means of axes or spades, the natural ties of the field that contained the bituminous earth, and then awaited a favourable wind. When this set in, they fastened to the stern of their boats these great strips of turf which floated on the surface of the water, and transported them to various countries. This was at length prohibited, because the shock of these floating masses threatened to break the banks and carry away houses.

We have shown the history of the formation of the high and low peat beds; but the original constitution of facts has been remodelled and overthrown by other natural agencies. Fires in the forests, the overflowing of rivers, the invasions and movements of the sea, have produced in the course of centuries changes which have left their mark.

That the Rhine for a long time sought and several times lost its mouth again, is a fact attested in the Netherlands by the presence of alluvial soil. When the course of the waters was rapid, the old high peat beds were swept away for a long distance from their place of formation and converted into low beds. At those spots, however, where the idle river dragged its waters slowly along, the low peat-beds were covered with a stratum of clay. Lastly, the sea did not remain quiet, and the peat beds of

Zealand were formerly covered by the waves. The inhabitants of these isles have, for a lengthened period, extracted salt from peat ash; and only gave up this trade, which was a source of great wealth, during the last century, when this article was brought from Spain and France at a low price. In the dunes of Holland, I found more than once under the sand, fields of peat which cultivation laid bare, and from which almost perfect tree trunks were drawn out. These dune peat-beds extend a long distance into the sea; anyone who walks along the coast may pick up, almost at each step, masses of peat in various stages of formation, which the sea casts up from its bed. In the Channel, between Dover and Boulogne, there is a bank of peat known by the name of the *tourbe bocagère*, which is supposed to be formed of nut trees. Near the Texel, there is a submarine forest, composed of large trees, in whose branches the fishermen frequently entangle their nets.

All these facts sufficiently prove that at the period when the ancient dunes of Holland, Belgium, and Northern France were broken through, the North Sea carried off enormous fragments of peat mixed with remains of forests—whole islands which, after being tossed by the tempests, were swallowed up, and now repose at the bottom of the sea. The floating and inconstant nature of the peaty matter itself tends marvellously to such

catastrophes. On those coasts where the sea meets with clay or sand, it advances in spite of the resistance of the soil, but does so slowly. At spots, on the contrary, where fields stretch out formed of vegetable glebe, the explosion of the waters may be sudden. Tradition, in this agreeing with scientific experiments, asserts that the present bed of the Zuyderzee was once occupied by old peat-beds which the fury of the waves destroyed, upheaved, and buried. It is certain that large heaps of rolled peat are daily thrown on to the coast of Friesland by the gulf waters. Lastly, the action of the sea not only destroyed these fields of bituminous matter, but has formed them. There is a peat-bed composed of marine plants, which may be regarded as the work of the ocean.

The origin of the peat-beds is now known, and it is time to ask what information naturalists and archæologists may derive from the foreign bodies found in this soil of recent formation. The objects discovered in the peat belong to the vegetable and animal kingdoms, or are the productions of human industry. One of the peculiarities that causes surprise in the flora of the peat-beds, is the presence of pine trees. Firs grow now-a-day in Drenthe, and several other provinces of the Netherlands, but these living trees are not the spontaneous offspring of the ground. They were introduced into Holland about two centuries ago,

and at the beginning these trees, imported at a great expense, did not thrive. It might be said that they had forgotten their native soil, for a lengthened period elapsed during which the Netherlands, though formerly peopled by pines growing in great abundance, as the high peat-beds testify, were entirely deprived of that verdure which has now been brought back by the hand of man. These natural lost fir trees, and which have been succeeded by foreign pines, indicate in themselves the very great changes that have taken place in the botanical geography of the Netherlands since the last revolutions of the globe.* We are equally surprised at collecting from the bottom of the low peat-beds an immense quantity of nuts, for nut-trees at the present day will only grow on sandy soil, or on the banks of running waters. Geologists have offered themselves the consolation of saying, that these nuts were conveyed by currents to the boggy bed of peat; but the explanation, however ingenious it may be, does not destroy any of the gravity of the fact.

The problems connected with the changes of the animal kingdom within historic times do not the less merit our fixed attention. These forests,

* The same fact is reproduced elsewhere. In Denmark there are, at the present day, no pines or oaks, only beech woods; though in the Danish peat a multitude of pines and oaks that vegetated *in situ* are found.

the cradles of the high peat-beds, were populated,—these marshes which gave birth to the low beds, had then inhabitants; and a vitality, under forms which it would be interesting to study and compare with present forms, formerly animated these wild districts. Unfortunately the organic remains found in the peat-beds are rare. Whether the chemical composition of this acid matter was not favourable to the preservation of buried bones, or that the instinct of animals led them to avoid these shifting fields, which are the tomb of vegetation and life, I must state with regret, that the fauna of the peat-beds is generally very poor. In Holland, however, bulls' horns and formidable stags' antlers have been found below the stratum of clay and the peat. In the neighbourhood of the Hague, I myself dug out of a peat-bed in the dunes the jawbone of some ruminant. Naturalists have as yet been unable to detect any generic difference between these animals of the historic period, and those now living on the surface of the globe.

A few of the ancient species are only distinguished from the present domestic species in the Netherlands by interesting, but slightly important, characteristics. We saw at Assen a bull's horn, which was found in a high peat-bed, and none of the bovine races now existing in the Netherlands have their horns bent in the same manner as this ancient inhabitant of Batavia. Many animals,

formerly indigenous, are now strangers to the soil; the beaver was common in Holland, and in the Middle Ages was even met with in Upper Germany, but it has now disappeared from both countries. The spot is pointed out where, a century back, the last wolf and the last boar were killed. In 1851, the remains of a deer were dug up in Groningen, at a depth of eight feet; this wild species was effaced with the existence of the ancient forests which served it as a retreat. Regarded with reference to the changes that have taken place in the geographical distribution of animals, the researches in the peat and alluvial soil become daily as interesting as those in the old earth. It is valuable to know the races of animals which civilisation extinguishes, for these bones constitute relative fossils which throw a new light on the history of organic life upon the surface of our globe. The extinction of living species is not a fact limited to the ancient world, but one that belongs to the general and permanent economy of nature. The animals geographically lost are connected by a link of causes, in Holland and elsewhere, with the generations of mastodons and of mammoths which sleep in the thickness of the antediluvian strata.

A fact characteristic of the peat fauna, and which separates it from an older order of things, is the presence of man. Near Veenendaal, an old

German, dressed in a bull's hide, was found; and in West Friesland a rider and his horse were also discovered. Still it is not man alone that is found in the peat-bed, but his works, objects of art and peculiar memorials of industry, are dug up from time to time. These historic fossils consist of rings, medals, bracelets, tools, earthen vessels, and fragments of weapons. A few years back, in one of the peat-beds at Manikensweerde, near Nieuport, a ship was found, laden with hand mill-stones, buried about five feet deep in the peat, and rising the same distance above the earth that covered it. Most of these mill-stones were used to pave the courtyard of an adjacent farm; but the heaviest and deepest remained in the vessel, which was again buried in the ground. Near Ardres a vessel laden with grain was also found.

The Museum at Zwol offers us a peculiarity of another nature; it is a German hat of black felt, found in the peat at a depth of five feet, not far from Zuidbroek. Between Valthe and Emmen, in the province of Drenthe, a wooden bridge, two-and-a-half leagues in length, runs under the peat-beds; and tradition states that the army of Varus passed over it. Tacitus alludes to the wooden bridges, *pontes longi*, which the Romans threw across forests. We saw in the Zwol Museum a clumsy plank which had been removed from the Valthe bridge, and the holes of the nails which had fastened it to a cross beam

were still visible. This memorial of the strategic art of the Romans supplies fresh indicia as to the ancient geography of these countries. The trunks of trees necessary for such works could not have been brought a great distance, and were certainly cut down *in situ*. The country was, therefore, then covered with forests, which, as Pliny said, cast a shadow over the frozen soil.

The relations of the peat-beds to history would become even more interesting if it were possible to estimate the age of the peat. As this recently formed soil contains vestiges of art, and as it has been developed since man's appearance on the scene, we should have in it an art of verifying dates, which would leave far behind it the researches of the most learned Benedictines. Unfortunately, this method of measuring time has hitherto remained uncertain and vague. It is believed that in the low beds fifty years are required to form six feet deep of peat; but nothing is known as to the growth of the high beds, except that they appear to be formed from the destruction of forests in a relatively short space of time. Science, however, does not despair about discovering the laws of this mysterious growth, and we have thought it right to indicate the light which the study of recently formed soil may at a later date cast on historical chronology.

The formation of peat and alluvial land connects

the ancient with the modern epochs of nature. The astounded eye discovers in the unity of the terrestrial globe the traces of a creation which has no beginning and no end. The line of diluvian land has for a long time been considered the limit between two systems, separated by a catastrophe; but now this barrier is effaced, and the geologist gains a glimpse of those relations of continuity which attach worlds to worlds. "I think; therefore, I am," man says. "I create; therefore I am," God declares. And Science discovers at each step it takes in the peat-beds traces of this incessant creation. The phenomena which formed and swallowed lands, and mineralised vegetable life, continue to act before our eyes in the present epoch of nature. The laws of the physical world have no more changed since the beginning of things than have the laws of the moral world since the establishment of societies.

The mass of peat formerly existing in Holland must have been considerable; not only have the inhabitants had no other fuel for ages, but not satisfied with burning this combustible matter at home, they have exported it and sold it to foreign nations. Still it is an old opinion in the Netherlands, that the day will come when peat must begin to fail, and that day does not now appear very remote. There is only enough peat left, it is said, in Holland, to last out a century. When Science

speaks of four thousand years elapsing before the exhaustion of coal, we may trust to Providence, the more so, because all the coal mines have not yet been discovered; but one hundred years are as to-morrow in the life of peoples. The living generations have unfortunately but little foresight for those which are to follow them. That charity which extends over the future was misunderstood in olden times, when the peat-beds were not properly managed. Already some economists have begun to regret that the forests have been destroyed, and propose to plant trees on the uncultivated soil; while others dream of regenerating the peat-beds. Experiments have proved that the matter formed of vegetable detritus collects with years; and this matter has even appeared to grow again after a period of rest had been granted to the old peat-beds, in which the means of natural reparation were not destroyed. In the presence of these facts, persons have asked themselves whether, regard being had to the approaching failure of the national combustible, it would not be advisable to produce the artificial growth of peat. Unfortunately, this growth is too slow. The production of peat is interesting for more than one reason, but it is a fact which political economy could not take into serious consideration.

If the peat were to give out, something of the national character would depart with it. Peat has

been celebrated in Holland by the poets; and the use of this combustible has given rise, in the popular language, to a number of proverbs and enduring aphorisms. Even the religious ideas, inherent in the Dutch character, have seen, in the transformation of this earth into a luminous and igneous substance, an image of mortal man, who will, through his immortality, put on a new nature and lustre, and thus become all brilliancy, all glory, and all love. Peat has made the Netherlands partially; but the relation between the presence of that combustible material and the manners of the different provinces, the state of prosperity of the inhabitants, the development of agriculture and trade, and the habits of private life, must now be studied on the stage of the geological facts. The Netherlands are, if I may use the expression, the antique vestal who maintained with her own hands the material and sacred fire of civilisation.

## CHAPTER IX.

FRIESLAND—THE MOUNDS—SPLENDID CATTLE—FRISON WOMEN—GOLD VEINS—VARIETIES OF HEAD-ORNAMENT—COURTING BY SIGNS—SKATING—GRONINGEN—DUTCH COLONIES—CULTIVATION OF OLD PEAT-BEDS—CHARACTER OF THE POPULATION—FREE TRADE—NAVIGATION—THE HEATHS IN DRENTHE—TRAVELLING BEES—THE HUNEBEDDEN—BURNING THE SOIL—FIGHTS WITH KNIVES—THE DEDEMSVAART—VALUE OF PEAT.

THE provinces that owe the most to the existence of peat-beds are Friesland, Groningen, Drenthe, and Over Yssel.

Friesland is at the present day a privileged district. It defends itself against the sea by a triple row of piles, which surrounds all its coasts; and each of these buried stakes cost seven florins. These wooden walls are, moreover, supported by masses of rock, immense boulders of granite, basalt, or trachyte, which have been brought from Norway or Germany. When we reflect that this formidable defence extends over a radius of twenty-five leagues, and that it breaks the efforts of the ocean that presses with its whole strength

upon the flanks of the province, we ask ourselves, what riches could be found in the soil, that the inhabitants could defend themselves against such an enemy? Formerly, the sea was at Leeûwarden, the present capital of Friesland; the magnificent plains that surround the town were re-captured from the waves. This ground is only three hundred years old, and a map still exists in which this arm of the sea is represented, under the name of the "Middle Sea." The old dykes raised one after the other against the internal enemy have remained, and still indicate the successive progress of the conquest over the waters. This Frisonian sea decreased in proportion as the Zuyderzee increased. An ocean of grass, a true paradise for cows, now takes the place of an ocean of water which has retired. Clay, peat, and sand constitute the entire soil of the province. Farms, which are a species of rustic palaces, give the traveller an idea of the prosperous state of agriculture, while pretty villages spread out under clumps of trees, and stand at regular distances on hills made by human agency, and called *terpen*. The first inhabitants formed these mounds as a protection against the waters, at a period when the country was not as yet defended by hydraulic works. We ask ourselves, whence they obtained the earth? for the eye can discover no trace of excavations in the vicinity.*

* These mounds contain a great number of artistic objects,

Friesland derives its main wealth from cattle and peat-beds. The law of natural affinities envelops the whole animal kingdom; there men are remarkable for their stature, and women for their beauty. The domestic races are fine. The reputation of the Frison horses is well known; but these noble animals must be seen roaming at liberty on the prairies and in groups, in order to form an idea of their value. On quitting its country, the Frison horse pines away or degenerates; it regrets the abundant grass of its native land, that water-nourished grass which rose to its knees. The horned kine present themselves under equally poetic traits. Fields of infinite verdure, enlivened by two hundred thousand head of cattle, have a physiognomy not to be found elsewhere. There are no dogs or shepherds; the flocks guard themselves, or, at least, are guarded by the water that fills the ditches. The peat-beds occupy the southern part of Friesland, where they have left lakes or patches of grass which the wind agitates like restless waves. The character of the inhabi-

and it was a happy notion to collect them at Leeuwarden, in a museum of national antiquities. I saw there, with much interest, small pipes with a narrow bowl and large stem, which were found at a very considerable depth. These pipes seem to be anterior to the use of tobacco, and it is supposed they were employed for smoking hemp. Antiquaries believe that they date back to the time of the Germans. The same form of pipe is found in Mithriac monuments.

tants is peculiar, and the Frison may be recognised by his independent carriage and open face. Protestantism is the dominant religion in the province. Friesland supports about 200,000 inhabitants, of whom only 20,000 are Catholics. It is worth noticing, that the religious reformation in the Netherlands was commenced by these strong and haughty races. In all times the Frisons have been considered indomitable: a masculine and generous love of liberty is associated in them with a respect for plighted faith, sure probity, a positive mind, and an inflexible will.

It is difficult to have seen Friesland and not speak of the women, whose beauty is no less celebrated than their head-dress. The origin of the head-dresses has puzzled antiquarians. Formerly, the women of the north, especially those of noble birth, wore golden coronets on their head, and this species of diadem was probably the prototype of the "irons," which peasant women nearly throughout Holland now wear. The character of the different provinces may be recognised in the various forms of this head ornament; for the choice of the national costume, in fact, expresses the feeling for beauty in races. In North Holland, the gold irons (it is thus they are called by virtue of a figure of rhetoric) are oblong and flat; in Groningen they terminate in a sort of flower or flower-pot; in Over Yssel in conical spirals; and

in Friesland in an ornamental button. The Frison women have two sets of irons, one for full-dress, the other for ordinary wear. When they wish to do honour to a visitor they don their gold plates. This head ornament has even become a language: if a young man visits a family to ask a young woman in marriage, he knows at once the nature of the feelings he inspires, and that without the utterance of a syllable. If the maiden leave the room and return adorned with her diadem, it is a sign that the lover is accepted; if, on the other hand, she remain seated before him without that ornament on her brow, it is a proof that she is unwilling to be his queen. These head-dresses are of considerable value, costing from two to three hundred florins a-piece, and hence the farmer who has a family of daughters is compelled to be rich.

The sentiments of the Frison woman have left more than one imprint on the manners and antiquities of the country. I saw at Leeuwarden a pair of the garters which lovers are accustomed to present their betrothed; on this silken ribbon I read a motto, which deserves translation; "Oh marriage bonds! your gentle joy makes everything in common between her and him! death alone can separate you, hence unite your two hearts." I also noticed with much interest a marriage knot; it was a handkerchief in which the lover offered

ducats to the girl whose hand he sought. If the girl unknotted the handkerchief, it was a sign that she consented to be his wife. This knot also contained an inscription; "Being in love does no harm, if that love finds its recompense in love; but if love has ceased, all is labour in vain. Praise God!" It is not infrequent to find Frison peasant girls with the feet and hands of duchesses; in the same museum there is a maiden's slipper, richly embroidered, which might easily be taken for Cinderella's shoe.

Still, the true footgear of the Frison woman is not a shoe, but a skate. In a country of lakes, the necessity of walking and running on the water, hardened by winter, has been felt from the earliest ages. This art is very ancient, for I saw a pair of bone skates, which were found in one of the mounds on which the Frison villages are built. These bones seemed to me petrified, and they were fastened to the feet by straps passed through holes made in the hard substance. Such animal relics were the rudiments of the modern skate. There are in Friesland clubs of male and female skaters, just as there are rowing clubs at Amsterdam and Rotterdam. The Frison girls in skating do not aim at elegance so much as speed; and this is again a trait of the national character, which seeks usefulness more than ornamentation. It is besides amusing to see these daughters of the north

gliding over the ice like apparitions; lovely, brave, and serious, they pass in a cloud, with their heads adorned with a halo of gold and lace. Fastening the skates on the feet of one of these rustic queens is an honour greatly sought by the young fellows, for the pretty skater requites this slight service with a kiss. Winter life occupies a great place in the history of Frison manners. I was shown a sledge bearing the date of 1793, which is a perfect work of art; the seat especially is covered with delicately painted pictures, representing Moses saved from the Nile; while the lower part of the sledge displays the star studded firmament. In this little shell, painted red, gilded, and carved in a Chinese style, a young woman sat, and steered herself by means of two iron-shod sticks, flying over the frozen waters with the agility of a swan traversing the air.

The manners of Friesland extend with some modifications as far as Groningen. It is impossible to visit the town of Groningen on market day, and not be struck by the picturesque elegance and brilliancy of the peasants' costumes. This luxury reveals real wealth, which is the result of the distribution of property in the province. The peasant is a freeholder, and the improvements he makes on his farm belong to himself; his children succeed him and inherit the fruits of their father's labours. Such a guarantee has produced in

Groningen a unique development of agriculture and comfort; and on this material basis a moral education has been established, which does not exist elsewhere. I found at a simple village, called Wehe, a museum of natural history and a botanic garden, these institutions having been founded and kept up by three hundred of the inhabitants. However, it is not our purpose here to write the intellectual history of the province of Groningen, hence we will limit our investigations to the wealth created by working the peat-beds.

Two old colonies, Hoogezand and Sappemeer, will supply us with an idea of the way in which the extraction of the combustible transforms an originally wild soil. Hoogezand, even in the sixteenth century, was a vague and uninhabited country, while the name of Sappemeer indicates an ancient marsh. There stretched out a famous and terrible lake; probably formed by the rain water pouring into a deep bed. There were no houses, men, or cattle; nothing but aquatic birds and wild beasts. All this had a fantastic and ill-omened aspect, and as the water heaved noisily in the lake, it was christened the Devil's Sea. Wolves were so numerous, that in 1223, as a chronicler tells us, they tore the living asunder, and even dug up corpses. The croaking of the frogs blended with the yells of the starving wolves; the lowing of the deer, and the lamentable cries of the

foxes, cast a terror over this abandoned spot, and for centuries a gloomy tranquillity did not cease to reign along the banks of the lake.

This great isolation was at length succeeded by the labour of man. After lengthened disputes as to the ownership of the land, the town of Groningen has become possessed of the ground near the lake, and disposed of it in lots to colonists. It formed canals which crossed the marshes and the lake itself, and through these cleverly arranged canals, the water was drained into the Zijpe, and other streams of the province. On March 26, 1628, the first boat laden with turf passed along the grand canal; and a few days later the first cart, conveying the same combustible, rolled along the road made by the side of the water. At the beginning poor cottages were built in these barren fields, and soon the extraction of the peat commenced on a grand scale. Peat incessantly diffused more and more wealth through this remote country of the United Provinces, and handsome country houses took the place of cabins and marshes. Each peat-bed, so soon as exhausted, was converted into arable land, which was first covered with oats, rye, and buckwheat, and eventually with potatoes. The buildings and clearings continually progressed, though not without meeting obstacles; and the works were several times suspended. But after each enforced repose, the

colonists said, with thorough Batavian coolness, "We will begin again," and they continued to restore life to this uncultivated soil. We have a right to feel surprised at the success of this undertaking, at a period when money was rare, and man had not at his disposal those machines he now possesses to multiply the strength of his arms.

Two great qualities distinguish the colonists of the sixteenth century—constancy and devotion. When we see after two centuries what they achieve, when we are witnesses of the consequences of their victory, and calculate the amount of obstacles they had to overcome, we experience a feeling of thoughtful admiration for these ancestors of the soil. A flourishing population, a continued circulation of boats and wagons, a wealth elsewhere unknown of buildings and pleasure houses, which rise at a spot where there were once only stagnant waters and a desolate heath,—all this forms a monument erected to the glory of human perseverance.

The population of these colonies was greatly mixed. At the outset, the inhabitants of all the United Provinces, and even of foreign countries, flocked to this land, to which they were about to impart a new existence. At a later date, refugees from the Palatinate and Switzerland sought here an asylum which their own countries refused them. Religious persecutions did not cease to

feed these industrious and powerful colonies; and Israelite families established themselves there, as their ancestors formerly did in the desert. After them came the Germans of the Lutheran communion. These soon effaced all their differences of origin, and of all the foreign elements which laid the foundation of a new social order, the colonists only preserved toleration. It is consolatory to see all these religious sects living in the most perfect union. The population of Hoogezand and Sappemeer are also distinguished by an independent spirit. They are more free from prejudice than the rest of the Dutch, and offer less resistance to new methods. Love of labour, a disposition to undertake anything, a persistency which nothing terrifies or discourages—such qualities must conduct the people to prosperity.

The transport of the peat gave rise to an important navigation; and that again to ship-building. At first small boats were employed, which increased in proportion as the circulation extended. The colonies of Groningen now possess docks, in which valuable vessels are built, which sail to the principal maritime cities of Europe, and notably to St. Petersburg; though they even venture to the Levant, and are beginning to visit America. You are really surprised to see all this naval prosperity spring up in the midst of an old heath. It is not so much the geographical position that contributed

to the development of this taste for ship-building in land, as that the enterprising spirit which animates the entire population has made up for the absence of the sea. Even if larger vessels are not built at these docks, situated far up the country, it is not because either industry or money are deficient; but because there is no canal sufficiently large to receive ships of considerable tonnage, and ordinary vessels already meet with considerable difficulty in reaching the sea. Groningen, for the sake of its own dockyards, formerly compelled the vessels built in the colonies to pass dismasted under its low and immoveable bridges; the ships were therefore rigged in that town, which constituted a source of labour and wealth for the population. But now-a-day, the municipal resistance has been overcome; turning bridges are being built, and ere long the vessels will pass through the town, ready for sea.

The ardour of the colonies reduces all obstacles. When it was proposed, a few years ago, to introduce into Holland more liberal navigation laws, most of the national dockyards were frightened, but the colonies replied: "Throw the seas open, we will compete!" and in fact, they have sustained the competition successfully. A great moral development is based on this material prosperity, whose first cause, we must not forget, was the extraction of peat. In these colonies there is an

institution for middle-class education, and ten schools for primary instruction.

From the province of Groningen to that of Drenthe a few hours make a great change. You soon come across everlasting heaths which, when I visited them, were in flower. A deep red colour spread over the surface of the black soil. This barren vegetation does not please the economist, but in the eyes of the artist it has a wild charm, which is not equalled by the richest cultivation. Remember, moreover, that we are in Holland, and that not the slightest of the earth's presents is neglected. The inhabitants of Drenthe cut heath to make brooms, and on these plains flocks of 1800—2000 sheep, confided to a single shepherd, graze. The green heath is cropped by the woolly animals, while the flowers are plundered by the bees, which are brought from the province of Groningen. When the colza crop has been got in, they come to collect honey from the flowering heather, or on the fields of buckwheat. This habit of displacing the hives according to the seasons and the period of flowering, is common throughout Holland. On the Zuyderzee I noticed travelling bees, which crossed the sea in boats, and were about to visit the various counties of Holland, as they became gradually decked in their flowers. The plains of Drenthe, which are inexorably flat, extend beyond visible range; after the heath,

begins heath again. On these naked and deserted plains you see hardly any trees, although dwarf oaks, not exceeding in height our most humble shrubs, lead to a belief in the existence of ancient forests. The fact, however, which opposes the growth of wood on these plains, formerly overshadowed by lofty trees, is the presence of the sheep, for those innocent animals spare nothing. The sheep, with their little poisonous mouths, as the peasants say, destroy the growing shoots the wind has sown. On these plains, rendered so melancholy by the absence of man, where partridges, hares, and grouse alone recall man to a feeling of life, there rise at regular distances old mounds, whose origin is attributed by some to the Celts, by others to the Germans.

These naked hillocks, or at the best only covered with scanty vegetation, are supposed to have been tombs. In the interior of several, which cultivation has destroyed, were found clumsy earthen vessels and calcined bones, flint hatchets, wedges, hammers, saws, arrow heads, rings (which are supposed to have served for money), stones for pounding grain and amulets. I examined these various objects in the museums of Friesland, Over Yssel, and Drenthe. These carpentry tools made of pebbles, the embryos of our present tools, these weapons, these household utensils, the sole vestiges of a people which has left us no other history, are found in

the most remote and various countries, even in Japan. I will not investigate here what this race, more or less lost, was; moreover, this history of the labour of a forgotten people is in melancholy association with the peat beds of Drenthe, whose natural history was hitherto no less obscure.

In the midst of these uniform plains that succeed each other, man finds everywhere, in and round himself, infinity and mystery. That which is most dark and inexplicable on this enigmatic soil is the *hunebedden*. It is difficult to gaze without emotion on these ancient Celtic monuments. These stones are not natives of the Netherlands, but erratic blocks, brought hither by ice. All is prodigious in the existence of these cyclopean altars, both the event that deposited them on the soil of the country, and the hand that raised them. We ask ourselves how such blocks could have been brought together and raised on the top of another without the aid of levers and the other machinery which science now has at its disposal. The peasants of Drenthe, seeing these monuments, of whose origin they are ignorant, believe that their country was inhabited by an old race of giants, who brought these stones on their backs.

The truth is, that the old peoples of the north placed their pride before all in strength, and wished to celebrate their passage on earth by monuments which might be referred to the demigods.

Those Latin authors who have alluded to the *hunebedden* called them, in fact, labours of Hercules. The destination of such monuments is as mysterious as their origin, though a gutter, sometimes hollowed in the stone, has led to the belief that it received the blood of animals, and that the *hunebedden* were employed for sacrifices. On the other hand, the Bible teaches us that the ancient peoples were accustomed to pile up stones in order to perpetuate the memory of certain events, and these *hunebedden* may have been either commemorative monuments or sepulchres. The general opinion is, however, that they are tombs. In the province of Drenthe there are about fifty of these masses of shapeless blocks. Near Assen, I visited two of these monuments, known as Druidic stones, and gloomy relics of a Titanic art. An old oak and two other trees grew among the large blocks on which I seated myself, and a bird I startled sang on the boughs. With my eye sunk in nature, and my thoughts wandering in the night of ages, I withdrew with regret from this spot which conduced to reverie.

In the midst of this desert of heath are real oases, through which small streams run, and where green plains stretch out, and trees grow; a village always occupies the centre of such a landscape. The clearings already developed on a very considerable scale, and the mode of effecting them in

Drenthe, deserves attention. Fir trees are planted, which devour the heath, and at the expiration of twenty years the firs are felled and the wood sold. The earth, enriched by the vegetable detritus of this artificial forest, is then prepared to receive the plough. But the heath plains themselves are not utterly abandoned by man's hand; they are burnt off, and from the ground, fertilised by the ashes, young shoots spring up, which the sheep browse. Agricultural industry is not satisfied with setting fire to the plants, but burns the soil itself, or at least the superficial stratum of bog which covers the high peat beds.

The ground has first to be drained. In October, a workman, called the *velnhakker*, or *houwer* (the peat-cutter), walks over the virgin peat-bed, with his feet in huge sabots, and his legs wrapped in straw to protect them from the water; he tears up the damp soil, and taps it by means of drains. This labour is painful; if it freeze and the upper stratum is hardened, he is obliged to leave off: but if the weather be not severe, the cutter works on the peat bed from the middle of October to May. The turf bed, when cut, is left fallow for the following summer, as the influence of the atmosphere is necessary to bring it to a state of maturity. In the second year, the ground is cut up afresh; and if the spring is dry, the peat is in a fit state for burning. For this purpose, a sunny day, with a

light breeze, is selected, the most favourable wind being an easterly one. The workman crosses the peat bed, carrying an iron cresset, filled with fire, and throws the burning sods against the wind. He begins his work at 9 A. M., and leaves off at an early hour, as in May and June the east wind generally lulls before evening. The peat-bed is rarely dry enough for the fire not to go out, partially at least, during the night. On the morrow, the workman sets about spreading and distributing the fire; his duties are delicate, and require a skilled hand. He must be careful that the fire does not expend the peat bed too much, for that would produce an excess of ash, which would be of no utility to the vegetation. It is not the ash, in fact, but the charcoal, which communicates fertility. Besides, he always runs a risk of firing the peat bed itself. It makes us tremble to see the Dutchman incessantly attacking with fire and water a country that totters under his feet.

The lot of this workman excites our interest; in a thorough perspiration, with face and hands blackened with dust, with a lump of rye bread in his mouth, the peat-burner passes entire days away from houses, separated from his family, and anxiously expected by his wife and children. The surface of the burning peat spreads a fearful stench through the atmosphere, and an infectious cloud darkens the sky. These clouds, driven by the

wind, desolate the towns of Holland in the months of May and June. The dense smoke which the peasant of Drenthe sends into the atmosphere crosses the sea, and even reaches the English coast. If the direction of the wind change, the cloud that was on its road for England is driven back on the Netherlands coast, to which it restores the odious tribute of its industry. Complaints have been frequently raised against an annoying custom which obscures the sky, and covers the earth with a sinister smoke; but the inhabitants of Drenthe obtain such profit from this agricultural receipt, that they would not give it up on any consideration.

The peat-burner passes the spring in this smoke, but does so with a satisfied countenance, if the field burn properly. When the flames have played sufficiently over the surface of the peat-bed, buck-wheat is sown in the charcoal. Flowering crops grow in the midst of the steppes, and in the autumn wains laden with grain roll along the hardly formed roads. The odious stench this mode of cultivation spreads in May and June is then forgotten, only to remember the profits. When the buck-wheat is carried, sheep are turned on the peat-bed, where they remain through the night. Next comes the holiday of the geese; and these gleaners seek with greedy beak the last grains of wheat. The second year gives a better crop than the first; the third surpasses the second;

but the other crops gradually fall off, and after ten years the ground is exhausted. A period of twenty to five-and-twenty years must elapse before the ground can be again burned.

Fire and buck-wheat crops only exhaust the superficial crust of the peat-bed; at a later date the owner is at liberty to open the vein of peat properly so called, and when that is exhausted, he comes upon arable land again. It is difficult to imagine the wealth of the Drenthe peat-beds; but canalisation is the basis of this branch of industry, and as canals have not been made as yet here, the high peat-beds in a greater part of this district only represent a sleeping capital. Still, we went in a barge from Assen to Meppel along a canal which has already spread life over these silent plains.

The manners of the labourers in the peat-beds bear considerable affinity to those of colliers. They are accused of squandering their money; and this want of foresight contrasts so greatly with the general character of the Dutch, that we are bound to seek the cause. The spirit of economy, which forms the basis of the Batavian temperament, is generally due to the influence of woman and the rank she holds in the house. Here, on the contrary, woman shares her husband's toil and mode of life; she loses in the peat-beds a portion of the delicate qualities of her sex. Work-

ing like him, she ceases to be the providence seated at the hearth.

A barbarous custom formerly existed in Drenthe, as in other localities of the Netherlands; we mean, the fights with knives. Hardly any village festivals took place at which there were not wounds and even deaths to deplore. The heroes of these sanguinary squabbles even felt proud of their deeds, and the scars such violence left on the face, far from being regarded as a stigma, were an honorary distinction in the sight of girls. Such scars attracted the attention of the fair sex, who saw in these amateurs of homicidal sports a quality which half-savage women value above all others—courage. The progress of morality has happily abolished an inhuman custom. The Royal Procureur at Assen called my attention, with considerable good sense, to the fact that correctional police and a moderate imprisonment had powerfully contributed to destroy this abuse by depoetising the advantages of brute strength. There are, however, some villages where this tradition is still in vogue, in spite of the law. The man who desires a fight, on entering the public-house, lays his open knife on a table: this knife is a defiance and a challenge, and anyone who touches it, through inadvertence or purposely, runs a risk of leaving the house with a bleeding face.

Drenthe is confounded with Over-Yssel, at any

rate in the outskirts, in the matter of manners, heath, and peat. I will restrict to the colonies of Dedemsvaart the history of the peat-beds of the last-named province. On a fine August day I left Zwoll in the morning, with an eminent economist belonging to the Second Chamber, Mr. Sloet van Oldhuis. We drove along exquisite roads bordered by beeches, birch-trees, and Canada poplars, the wood of which is employed here for the manufacture of sabots. A capital of several million florins grew thus along the roads, over which it threw shadow and freshness. On the road-side we noticed clumps of oaks, which are cut down in the ninth year, and the bark is employed for tanning. Keeping these trees in good condition demands a great number of workmen, but public economy is never so grand as when it associates the feeling of utility with the poetry of nature.

Anyone who travels in Holland must always expect to come across prairies. On the green meadows of Over-Yssel a clump of trees grows, beneath which the cows rest and enjoy the fresh air during the heat of the day. While these trees are still young they are protected against the teeth of the animals by trellis-work. This foresight toward the beasts is touching, and evidences a kind-hearted people. Gradually the meadows give way to steppes, and in the midst of the desolate

heath, the eye rests from time to time on a natural prairie, like those found in Texas. The very *landes* of Over-Yssel do not remain unproductive under the hand of the Dutch; for heath is cut from them for fuel, and pebbles obtained to mend the roads. What was my surprise to see the sods of turf (*plaggen*) removed to feed fires! The strips of dry grass, or rather of roots, in which the unaided eye can trace the delicate network, mixed with a crust of earth, are carried to town at the rate of a florin a cartload, where they are used for baking bread. The peasants of Over-Yssel even employ these sods of moss and withered grass instead of thatch to cover their cottages. Nothing is lost: but what a distance is there between this savage economy and the wealth cultivation is about to develop before us?

Dedemsvaart is a canal: nothing more or less. The creator of this canal, Mr. Van Dedem, died a few years back, poor, heart-broken, and misunderstood by the injustice of man. He watched in silence the birth of an agricultural world for which he had paved the way, but his fate was that of all initiators. Happy that there was still one heart to appreciate him, one hand to press his, he sat down proud and gloomy by the hearth of his few friends. The truth is that the Dedemsvaart has been a useful, excellent work, not for the undertaker, alas! but for the adjacent colonies

which have now emerged from the desert. The water-way has insured the circulation of peat, manure, and produce created by human industry.

At Hoogezand and Sappemeer, we have seen old colonies, created by the men of the seventeenth century; but Avereest is a rising colony, the work of men of our day. A few years back the only tree that formerly grew on this old heath was pointed out: it was, I think, a birch. This tree has disappeared: but rich plains, with clumps of verdure, orchards, and new plantations spring up as if by enchantment. On all sides fields are formed; nature, a fertile chrysalis, daily puts off her larva, and displays proudly a face embellished by art. The vital action of all this agricultural prosperity is the Dedemsvaart: into this canal an infinity of smaller canals leading to the peat-beds debouch, in proportion as the clearings are effected. The water vivifies everything in its passage along the banks, prairies emerge from the old heath, flocks spring into life, and houses start up. The canals trace the development of all this agricultural prosperity, just as in the embryonic formation of the human body, the blood-vessels trace the physiological development of the organs.

We visited a farm having 750 acres of cultivated land, on which ninety cows and forty pigs

tranquilly enjoyed life. The stables, cowhouses, and instruments of labour, all displayed true rustic opulence. When we reflect that this wealth dates from yesterday, we recognise with a feeling of sympathy what human industry is capable of. Twenty to twenty-five years back, only goats were to be seen in the colony, but now farms and houses succeed each other, possessing an air of elegance and cleanliness. The first colonists dwelt in holes dug in the ground; these were followed by cabins, and these again by neat brick houses. None of the old subterranean abodes remain, in which the first inhabitants of the colony hid their misery and their hopes a quarter of a century ago; very few of the cabins, the monuments of the second stage of things are left, but houses are springing up on all sides with astounding rapidity. The old race of Troglodytes has disappeared, to make room for an ever-growing, industrious, well-lodged, and well-clothed population.

In this colony the visitor goes through a course of political economy in action. The division of labour and commerce has but slightly progressed as yet: the same shop sells everything, and a milliner keeps, in addition to bonnets, clocks, spices, flour, and feet warmers. Moral development is ever associated in Holland with that of material comfort, and there are four schools in the

colony. Such an association of facts as land being reclaimed and youth educated, is pleasant to look upon. There is no greater or more moral spectacle than that of man extending by labour the domain nature has given him. When we now reflect that it is peat which has done all this, we ask why the inhabitants of the old world rush to the deserts of America, instead of coming to transform the plains of Drenthe or Over-Yssel. The first colonists who arrived to work this great California on the banks of the Dedemsvaart were generally foreigners: there were among them Germans, Poles, and Greeks, but the land exercises a power of rapid assimilation over these heterogeneous elements, and Avereest at the present day is to all intents and purposes a Dutch colony.

The working of the peat-beds, regarded as a principle of industrial and agricultural wealth, has created entire provinces: it has supplied and still supplies employment for the needy classes, and it has transformed vagabond beggars into land-owners. Some economists now desire that the peat-beds should be freed from the excise dues, and various taxes raised from them. This would be certainly a method to give a fresh impulse to works which, we must allow, however, were not paralysed by the dues paid to government. We have seen what the Netherlands owe to peat: and

in the presence of such economic and moral facts, we might be tempted to exclaim with the old poet, Vondel: "Happy the country where the child burns its mother!"

Peat, however, is not the only present of nature which has given rise to wealth and comfort in the Netherlands; there is another source of riches from which their commerce and political grandeur sprang up; for, are they not surrounded and nearly submerged by the sea, a fruitful field of living creatures?

## CHAPTER X.

THE FISHERIES—THE BROOM OF THE SEAS—HERRINGS—VLAARDINGEN—THE HERRING BUSSES—WILLIAM BEUKELSZOON—THE GOLD MINE OF THE REPUBLIC—THE GREAT FISHERY—THE GUILD OF FISHERMEN—PROTECTION—THE FIRST HERRINGS—A PRESENT TO THE KING—ENGLISH COMPETITION—A GOVERNMENT INQUIRY—BRAVERY OF THE SAILORS—THE WINTER FISHERY—CATCHING COD FISH—DISASTERS AT SEA—MODERN PENELOPES—PAY OF THE FISHERMEN.

THOSE historians who have written of the Batavians and Frisons have forgotten to tell us how those peoples lived. They celebrated the wars, forays, and enterprises afloat and ashore of the first Hollanders, but they had told us hardly anything of the fisheries, the most ancient of the useful arts, and the one which laid in Holland the foundations of the national prosperity. When history is silent, it behoves the political economist to trace out the material causes on which the moral power of a state has been raised. No one is ignorant of the important part the United Provinces have played in the world; time was when

the Batavian nation declared itself the "broom of the seas;" when, after conquering Spain even in the Indies, it protected the successors of the king it had expelled; when it resisted all the might of Great Britain and France combined against it, and the Thames saw Dutch men-of-war enter its waters with flags flying and all sail set. When we now reflect on the causes of so rapid and incredible an elevation, we perceive to our amazement that all this historical grandeur has its origin in a fishing-boat.

Fishing was in the Netherlands the cradle of navigation and commerce. As in the human body an organ needs the help of the other organs to live and act, so each country, if it wish to prosper, needs the productions foreign countries supply it. The wealth wanting in one country is represented in it by the superfluity of natural wealth produced there; it is this law of the distribution of produce, which opens up to society the fertile road of exchanges. The Netherlands wanted a great many things necessary to life, but they found in the adjacent seas ample compensation for the sterility of the arable land. Fishing supplied the country with abundant stores of food; by sending to other countries the produce of her nets, which far exceeded her wants, Holland obtained grain and building wood, the origin of her trade, and the foundation of the greatness of

her cities. Her industrial genius changed and transformed primary substances by the miracle of exchange: it is thus she made bread, gold, and diamonds of the flesh of fish.

The sea has been for all modern societies, but specially for Holland, a great stage of moral development. The influence which this mass of water has exercised on civilisation has hitherto been too slightly noticed: without it man would not have acquired the full consciousness of his strength; he would not have directed his eyes to heaven with intrepid perseverance, to observe the movements of the stars: the physical sciences, industry, and the useful arts, would not have passed with so assured a step the boundaries of religious Mediævalism.

It is useless to quote passages, more or less obscure, which reveal the very ancient origin of maritime fishing on the coast of the Netherlands. The alimentation of races is based, at the commencement of the social stage, on the means of existence nature has supplied them with. The vicinity of forests and plains has made hunting peoples: the vicinity of lakes, rivers, and the sea, has made fishing peoples. A great portion of the population of Holland has lived for centuries on the produce of their nets, and the inhabitants of the Netherlands had grafted various branches of commerce on the fishing trade, long prior to

the War of Independence. The Reformation did not create the Netherlands: but, even though the Dutch fisheries existed before the religious and political revolution that freed the United Provinces, it is equally true to say that this trade, like all the elements of public fortune, derived fresh sap and vigour from liberty. It was only then that the country felt itself live in its plenitude, and that it began, according to the remark of an historian, "to enjoy the seas." At the present day, although some Dutch fisheries are in a state of decay, the importance of the trade is still very considerable, as will be seen from statistics that we borrow from official documents. To this useful art, moreover, is attached a degree of political grandeur and independence for the Netherlands. The Dutch fisheries contribute to insure means of existence for the laborious classes: they form a training school for daring sailors, and give rise to an international commerce which only awaits the lowering of the customs dues, to regain a lustre which has been obscured for more than a century.

According to the nature of the fish found in the North Sea, the Dutch fishery is divided into several branches: but there is a thoroughly national produce which may serve us as a type to determine the character of the various local fisheries, and that is the herring. It is supposed that

the herring was unknown to the ancients, for none have as yet been found in the Mediterranean. This product of the ocean has been to the Netherlands an element of greatness and prosperity: the herring, by being placed in barrels, changed the historic destinies of Holland, and with them those of the world in the sixteenth and seventeenth centuries. A trade which exerted so great an influence over the revolution of the United Provinces and the events that followed it, is not unworthy of our attention. So long as the Dutch fishery annually produces above fifty million barrels, it will count among the largest maritime fisheries in Europe.

The Dutch distinguish three species of herrings: (1) the pickled or cagged herring, called in Dutch *gekaakte haring*, which is caught off the north coast of Scotland during the summer; (2) the *steur haring*, caught in autumn off the Yarmouth coast, which is first salted and afterwards smoked, when it takes the name of *bokking*; and (3) the *pan haring*, a species of fresh herring, caught in the Zuyderzee, and serving as food for the poorer classes. From time immemorial, the pickled herring fishers have established the seat of their guild at Vlaardingen and Maasluis—the coasts of Holland are lined with villages whose inhabitants, like those of Scheveningen and Katwyk, prepare the red herring—while, lastly, the towns on the

Zuyderzee, and specially the islands of that inner sea, for instance, Urk, Shokland, and Marken, send boats, to catch the fresh herring. Sea life is common to all these colonies of fishermen, but has shades we will attempt to indicate. The character and habits change according to the nature of the spot and occupations, and the longer or shorter period the crews remain out at sea. What does not change, however, is the humble majesty of this brave and poor population which wrests from the tempests its daily food.

The little town of Vlaardingen (on old maps Flerdling) announces itself by a steeple, which in the distance bears a strong resemblance to a ship's mast, and which rises from an ocean of verdure, spotted with black kine. We are assured that it derives its name from an old river of which nothing remains but a mention, more or less honourable, in the archives of the province. At the present day, it is situated on the Meuse, or, to speak more correctly, on an arm of the Meuse, which is divided at the spot by an island of recent formation. The vessels lie in a quiet port, along which the store-houses stand on the quay, severe-looking buildings, with openings closed with wooden shutters, and in which the fishing implements are kept.

From a few of these unglazed windows hang out long nets to dry : on the port, men with faces

bronzed by the sea wind and the sun, are discharging heavy barrels from the vessels which have brought them in. These vessels, called *buizen* or *doggers*, are solidly built, for the most part of oak, with a single mast, and a large square sail, which is lowered so long as the buss is at rest. It is impossible to regard, without a feeling of respect, these fishing boats which have braved the northern tempests; some bring back from their last voyage noble scars; their cobbled sides, their sails frequently torn like flags after an action, their rusty anchors, which announce honourable service, all record the defiance they have hurled at the elements.

Vlaardingen was formerly an important and fortified town, but like all Dutch towns that lie by the sea, it has fallen from its high estate: *jam pagus est quæ Troja fuit.* In the small, narrow, and low streets, brick houses, bowed like vessels by the breeze, shelter the households of the fishermen. These abodes, whose cleanliness is their whole wealth, have a simple and modest, but in no way sad, aspect. At Vlaardingen you meet, during summer, only women and children in the streets; the men are out at sea. These women dry in the front of their houses the linen they have just washed, or else they work at the nets. Out of a population of 7000 or 8000, 2000 are fishermen; the rest carry on, more or

less, trades relating to navigation. There are four docks in which fly-boats are built.

Some thirty merchantmen that trade with the Mediterranean, anchor in the port several times a year; some bring back salt from Spain and Portugal, with which the herrings are prepared. At the door of some brokers there is, instead of a sign, a small vessel painted and carved with all sail set. Hence everything in the appearance of the town, in the habits and external signs, reminds you of a seafaring life.

The history of the herring fishery ought to be written at Vlaardingen, amongst these nets which had such weight in the destinies of the world, these busses which for a long time excited the jealousy of England, and the poor families through whom the fortunes of the Netherlands were to a great extent raised.* Belgium appears to have been the cradle of this fishery, but toward the middle of the twelfth century it passed from Flanders into Zealand. Although prolific, the capture of this fresh fish would never have constituted an important branch of the national

* The herring fishery is not confined to Vlaardingen; busses set sail from the ports of Maasluis, Zwartewaal, Delfshaven, Enkhuisen, Amsterdam, Ripp, Middelhornis, and Wormerveer; but in 1853, of ninety-three vessels constituting the flotilla, for the great fishery, sixty hailed from Vlaardingen. We may, therefore, regard the latter town as the centre of the pickled herring trade.

commerce, had it not been for the discovery made, about the year 1380, by William Beukelszoon.

It was this man who invented the art of preparing and preserving herrings with salt. Nothing is known of his life, save that he was born at Biervlict, a little village in Zealand, but there are few discoveries which have produced such riches, while demanding no sacrifice of humanity. These small causes, disdained by history, do not escape the attention of those who place side by side with political events the revolutions accomplished in the nourishment and comfort of modern nations. In the sight of the economist, no production is vile. Charles V., well aware what Holland owed to the pickled herring, determined to perpetuate the memory of so great a service rendered to the country; being at Biervlict in 1536, he had a monument erected to Beukelszoon, who died in 1397. There are few instances of a tombstone so well deserved. The Gospels teach us that one of the disciples found in the mouth of a fish a piece of money to pay the tribute, and it is the history of Holland; she has found in the mouth of the herring the means to pay her enormous taxation, to defend a country which the sea was ruining, and to find the sources of the public wealth.

Another circumstance came to complete Beukelszoon's discovery—the first large net for the herring fishery was manufactured at Hoorn in

1416. You must have seen at Vlaardingen these immense nets discharged into carts; you must have reflected on the myriads of herrings which they have swallowed up for more than four centuries past, and on the historic consequences of such an invention, in order to comprehend all the usefulness and poetry of these drag-nets. With the progress made in the art of catching and preserving the herring the fishery extended, and then altered its place. Toward this beginning of the fifteenth century it was established at Enkhuisen and at Hoorn. The wars with Spain and France having broken out, the Zealanders found more profit in arming their vessels and skimming the seas. The herring had, moreover, changed its station; it left the coasts of Norway, Sweden, and Denmark, where it was then caught, for those of Scotland, where it is still found. This inconstancy in the movements of the fish is no peculiar instance; other seas are mentioned in which the herring has appeared, disappeared, and reappeared at considerable intervals of time. Scientific calculations have hitherto been unable to determine the law of these movements.

However this may be, the herring fishery thus passed over almost entirely to the two provinces of North and South Holland, where it maintained itself for a long period at a degree of considerable prosperity. All tends to the belief, it is true, that

the results of this maritime trade have been slightly exaggerated. If we were to accept without criticism the statistics given by some historians as to the importance of this fishery, and the number of herring busses, we should be bound to conclude that the whole male population of the seven United Provinces was engaged in catching, pickling, and selling herrings. While retrenching from these statistics excess or invention, we are compelled to allow that this branch of commerce was extremely prolific. A writer, more or less worthy of faith, returns as nearly 20,000 the number of persons who derived their subsistence from the herring fishery. More than once, Great Britain was disturbed at seeing the Dutch boats collecting on her coasts all this manna of the sea. The herring, or great fishery, as it was then called, was at that time regarded as so precious a branch of the national commerce, that in several edicts it is entitled "the Peru (*goud myn*) of the Batavian Republic." Who could have suspected that this so flourishing trade, that this great fishery (*groote visscherij*) was destined to expire one day under its renown? And yet such is the state of things at the present day. As dying of glory is no common destiny, either for trades or for persons, it is proper to investigate the causes of this decadence which bears so little resemblance to the ordinary decline of human greatness.

The art of pickling herrings has hitherto constituted a monopoly; and this trade was protected, that is to say, regulated. The period of the year when the nets were to be cast into the sea, the length of these nets, the number of meshes, the shapes of the busses, the day of leaving and returning to port, were all determined by regulations and usages having the force of law. The guild of herring fishers was bound by a solemn oath, and all the members, no matter who they were, were prohibited from carrying on their trade in foreign countries. Men of other nations were not even to be allowed admission to the fishing boats. In exchange for these obligations and penalties, the fraternity enjoyed great privileges; they alone could prepare and salt the herrings on board, and they also received premiums which were refused to all the other branches of the fishery. This anxiety was reasonable at a period when the art of pickling herrings had not yet been divulged, and we must allow that the Dutch herring owed to these regulations a portion of its reputation. This excellent comestible defied the rivalry of other countries in every European market; the Dutch herring was a veritable power, and we may say that it effected more for the grandeur of the United Provinces than the cannon of their vessels. But times change, and with them the destinies of trade; the Dutch herring, although it stood so high in the

economic régime, and perhaps through that very elevation was assailed by those reverses of fortune which sooner or later overthrow all despotisms. Great Britain had entered into the struggle, and after trying the system of bounties, and piling up ruins on ruins, she latterly called to her assistance freedom of fishing. From that date, the Dutch herring, so aristocratically expensive, saw itself not disdained, but isolated. While England went ahead, the old Dutch fishery, motionless beneath its golden chains, the slave of its celebrity, so proud of its premiums and privileges, has seen the number of its busses decrease year by year. In order to judge this critical situation we must compare what is with what was, for such a contrast will put us on the right road to a solution.

Up to recent years, the departure of the boats for the great fishery was fixed for St. John's day (June 24th). This departure was preceded by fêtes, and a book of old Dutch songs still exists, sung by the fishermen as they put to sea. Toasts were proposed to the success of the fishery, and prayers offered up; at last sail was set, and the peaceful flotilla started for the herring conquest. At the present day the doggers start at the beginning of June, and can open the fishery at once; but faithful to tradition, or, if you will, to prejudice, the fishermen take advantage of this new liberty very reluctantly. "The herring,"

they say in their simple language, "does not like to be caught before St. John's day." In 1755, the number of busses that started for the great fishery was 234; in 1820 it was 122, while at the present day it is 90. This group of sails proceeds toward the Scotch coast, two vessels of war accompanying them as an escort. The fishermen are forbidden to land, nor must they sell their fish on board. The flotilla remains off the Shetlands, Edinburgh, and the English coast. The reputation of the Dutch herring depends especially on the strength of the doggers,* which are excellent sea-boats, and their build allows them to throw their nets into very deep water, where the largest herrings are found. From 1300 to 1400 men take part in the labour; the herring is no sooner seized by them than it is pickled, that is to say, slit up with a knife-blade and placed in barrels; salt is added, which turns into brine and preserves the fish. For some years past a steamer has accompanied the flotilla, on board which the first hundred barrels are placed, and it carries them at full speed to the port of Vlaardingen.*

* On the following days five vessels known as the "hunters," and which carry a blue flag with white spots, collect the produce of the fishery. So soon as the first hunter has collected 120 barrels, it starts for Holland; the second returns with 170, and so on to the last. By the time the hunters have completed their task, the gilt is pretty nearly removed from the extraordinary demand for early pickled herrings.

Formerly the arrival of the first herrings was the occasion for national festivals, a ceremony whose brilliancy has diminished with the importance of the fishery. At the present day the fishmongers at the Hague, Amsterdam, and Rotterdam content themselves with hoisting a flag over their shop, and hanging up a crown of leaves. The first herring is always carried on a car decorated with flags, and triumphantly offered to the king, who gives a reward of 500 florins for the present. A few years ago even, in the opening days of the fishery, rich Dutchmen offered the fishmongers of the Hague a ducat a-piece for herrings; each dealer consequently made interested sacrifices to be the first to obtain this gift of the sea which reached Vlaardingen on the wings of steam. One of them, a clever fellow, told us that twenty-four herrings brought from Vlaardingen to the Hague by ten men mounted on fast horses, cost him for carriage alone 200 florins.

At the present day, early herrings are still sought after, and they are sold at the beginning of the fishery for three or four shillings a-piece. The rich inhabitants of the Hague send small barrels to their friends in Dremthe or Overyssel, who forward them game in return. All this may be interesting as a detail of manners, but regarding it from an economical point of view, we may ask, whether the state ought any longer

to protect an article of luxury, an object of fashion, which is only consumed by the wealthy classes. Thanks to the inspection and the system of preserving, and the fire-brand imprinted on the barrels, the Dutch herring still maintains its reputation in the world, but that is all ; *stat magni nominis umbra.* So long as this product of art and nature maintained the splendour of the United Provinces, paid their fleets, and extended commerce, every wise and practical man would refrain from smiling at it ; but now that the useful side has disappeared, the kingdom of the Netherlands has something better to do than set its honour on a herring.

It is perfectly true, that the economic import of this trade does not stop here ; the great fishery has a more serious basis than a pecuniary bounty. When the five vessels have carried off in turn what is called here the flower of the fishing season, the men continue to cast their nets, and the doggers return to Holland with their captures. These boats can hold 420 to 450 barrels ; but it is very rare for them to return with a full cargo ; we saw at Vlaardingen two fishing boats return after an absence of seven weeks, each bringing 150 barrels, and the outfitters appeared quite satisfied with the result. The great fishery produces about 34,000 barrels of pickled herrings, of which 21,000 are exported, producing on an

average 18,500*l.* These figures are certainly respectable, but what a difference when we place them side by side with the English fisheries! In 1849, England had at sea 14,962 fishing-boats, employed 104,472 men, and filled 770,770 barrels with pickled herrings.

We are compelled to allow, that the English fisheries, whose development is quite recent, have advanced with giant strides since the day when they shook off the fetters of bounties; while the Dutch fisheries formerly so celebrated have remained stationary, and have even retrograded under the protectionist régime. At a period when the revolution of cheapness attacks one after the other all the branches of the economic tree, an article that haughtily isolates itself in its reputation is an anachronism. The Dutch herring, that patrician elbowed in the export markets by the foreign herring of less noble origin and less delicate quality, but which is sold at a lower price, can no longer sustain the competition. These facts have attracted the attention of the Government of the Netherlands; an inquiry was ordered, and this inquiry has thrown light on the weak points of the system. All interests were heard, they came one after the other to plead their cause before the Committee, and despite the opinion of interested parties,—that is to say, the outfitters—the conclusion has been arrived at,

that the privileges the great fishery has enjoyed for centuries should be abolished in favour of free trade. The Government have entered on this path, and the premiums have been successively reduced, with the avowed intention of abolishing them. The State, however, has considered itself bound hitherto to restrict its initiative to these first measures, and has left to the provincial councils the care of modifying the old jurisdiction in certain points, while reserving to itself the right of introducing, at a later date, a law which will place the interests of the national fishery in harmony with the principles of free trade.

If we wish to form a more precise idea of the injurious influence of the bounty system on the national fishery, let us return to Vlaardingen. What do we see here? A species of sorrow and solitude reigning over the port. Ten years ago, there were nearly eighty fishing-boats at Vlaardingen; now, there are scarce fifty. These doggers are for the most part of a respectable age, and as they grow old or fall to pieces, they leave gaps in the navigation, which no one any longer cares to fill up. The vessels diminish and the men are failing. The Vlaardingen fishermen, especially if the winter fishery has been bad, find it more advantageous to enter aboard merchantmen; their places are then filled up by foreigners, chiefly Prussians. These signs of decadence or

rather of renovation (for the Dutch fishery is in a state of transition) must not divert our attention from the personnel and the machinery, which have so long maintained this fishery at such a height of economic power. A few words will suffice to describe the history of the busses, from the moment they leave the docks to that when they set out for the North Sea, fully equipped and manned.

Hitherto the doggers were built at Vlaardingen, the price of one with its rigging, nets, and all the fishery material, being twenty thousand florins. The owner of the vessel makes an agreement with a master who undertakes to provide his own crew, which in summer is composed of eleven men and four boys. The owner has only to do with the master, and he pays him five per cent. of the produce. In the summer, the men receive fixed wages, five florins and three-quarters a-week; and they make two voyages for the herring fishery. Their usual food is oatmeal, their drink coffee and gin. Most of them have been at sea from the earliest years. We saw on board these doggers lads of ten to twelve years of age, whose families send them to school during winter, and to the great fishery in the summer. As for the courage of these men, it is invincible; braver than the sailors on board merchantmen, they do not know what danger is. History so prodigal

of praise, when she has to describe naval engagements and butcheries on the water, maintains silence so soon as she has to deal with the pacific struggles of men with the elements. It seems as if heroic actions lose their claim to celebrity from the moment that they become useful.

Is it not time to grant something better than oblivion to these interesting persons who go to gain wealth, not for themselves, alas! (for they remain poor) but for society at large? Among these obscure fishermen, there may be perchance unknown Van Speyks, whose courage has only lacked the opportunity to display itself on a larger and more brilliantly lighted stage. What these men are worth, what fatigues they have undergone, and how many times they have looked death in the face, ocean knows, but ocean says nothing about it. For their part they do not allude to it; the sea and they are enemies who silently esteem each other. Besides bravery, some of these men possess other astonishing qualities. Though generally ignorant, when once at sea, they become excellent practical sailors; some may be found who are gifted with a true knowledge of navigation; and in them this gift, aided by experience, supplies the want of theoretical knowledge. A shipbroker at Vlaardingen pointed out to us, a master who walked

about in waistcoat and wooden shoes, who was in his way, a species of Christopher Columbus. He was told a few years back, "You must go to the Indies," and he went; another time he found his road to California. Reaching known lands with so little acquired knowledge, is almost like discovering them.

The same vessels, which have made two summer voyages to the herring fishery, proceed in winter to catch cod (*kabeljauwvisscherij*). It is true, that this depends partly on the age of the doggers; for when a boat is too aged, it cannot stand the winter fishing. The crew consists of twelve sailors, who receive two-and-a-half per cent. of the produce, the captain receiving the double. The North Sea is also the scene of this fishery; but the vessels now sail to the coast of Iceland and the Dogger Bank; they go up to the sixty-third degree. For this fishery nets are not employed, but a cord of considerable length, armed with hooks fastened at some distance from each other. The same vessels and men make three or four voyages through the winter, and bring back cod, either salted or fresh. In order to convey it alive, each dogger has a tank into which the fish are thrown, which continue to swim, and be supplied with salt water, as if they were at liberty.

This winter fishing is most dangerous: two years ago, two boats perished in these ferocious

waters (*aquæ truces* Tacitus calls them); and on the average one boat a-year does not return. In winter, when the voyage lasts more than five weeks, it is because the dogger is shipwrecked. The wives then look out, with an indescribable feeling, along the shores, and if they see nothing arriving seaward, they return home sad and broken-hearted. It sometimes happens that the boat is lost, and the men succeed in escaping on board another vessel; but that is very rare. We cannot think, without a feeling of sorrow, upon this obscure and gloomy ending, enveloped in the mysteries of the ocean, of these unhappy men, of whom their very families know nothing save that they have not returned. When you then look around you at these men of Vlaardingen, whom the same fate perchance awaits, and who, reckless of their lives, gaily load their vessel for the next trip, you feel a sort of painful admiration which contracts the heart.

The cod fishery is one of the oldest and most celebrated in the social history of Holland. Like that of the herring, it has lost much of its ancient prosperity; though it is not because the results are less favourable. In the last ten years the fishermen have proved, by their increasing takes, that the fish have not diminished in those seas, or man's hand lost its cunning. What is needed for the cod fishery, as well as for that of the herring,

is an outlet. The Netherlands have close at hand an excellent market in Belgium, who fasts for one portion of the year, like the good Catholic she is; but unfortunately this market is closed by a heavy import duty. It is the same with France; in France salted cod costs 60 francs the barrel, in Holland 30 to 35; but the wall of the douane prevents any competition being established between the two countries. The future of the Dutch fisheries is attached to free import into neighbouring countries, and this is energetically claimed by most Belgian economists on behalf of the working classes.

The life of the herring fishers, who become cod fishers in winter, is entirely at the mercy of the waves; these men only spend two or three weeks of the year ashore. When they return to Vlaardingen after a voyage it is to start again directly. Identified with the sea, with its calmness and fury, its good and evil days, they live on the presents it makes them, or, to speak more correctly, which they tear from it. In requital of this harsh existence, full of fatigue and toil, and exposed to all the fury of the elements, these men, who have made the entire political and commercial grandeur of Holland, receive but a scanty wage: a fisherman gains from 250 to 300 florins a year.

We may ask what becomes of the women of

Vlaardingen during the time of the fishery, or nearly the whole year. They look after the houses, and in the rest of their time work at making nets at home or at the shops. This semi-widowhood does not seem to be very painful to them, and they find consolation in their children, who are numerous, and to whom they are at once mother and father. When the husband does not return, they at length resign themselves to this absence which never terminates. Formerly the law interdicted women from remarrying within ten years, who could not supply satisfactory proof of their widowhood. What proof could the poor women of Vlaardingen offer of the death of their husbands? The ocean does not announce deaths, and the proof of a shipwreck lies in the absence of all news. Morality suffered from this legal arrangement, for every woman has not the obstinate fidelity of Ulysses' wife. The government, therefore, acted wisely in modifying this article, and allowing the wives of fishermen to marry again after three years. The condition of Vlaardingen, its melancholy streets, its silent paths, its sea-going vessels which are growing old and are not removed, all this announces the state of suffering into which the great fishery has fallen. And what can be said of Maasluis? that is a different sort of desolation. This poor village, situated on an arm of the Meuse, which it is proposed to do away

with, has the air of a man condemned to death who implores mercy. Though the present state of the great fishery be so sad, we must not, however, lightly pronounce the word decadence. What has grown old and is crumbling away at this moment, is the system of bounties, the consecrated forms of an organisation which has been brilliant, but has no longer a reason to be so. We do not doubt but that the Dutch fishery may be regenerated under a *régime* of liberty. Vlaardingen, besides, will possess for a long time the advantages given it by its excellent fishing material, the renown of its productions, and the skill of its sailors. With these it can abandon a monopoly which we especially reproach with having stifled under a vain name the interests of the other Dutch fisheries. The pickle herring, that historical celebrity, has brought into immense contempt the coast herring, and specially that of the Zuyderzee. It is against this ostracism that a wise political economy now protests. It is not just that an article of luxury, a forbidden fruit (at least at the opening of the fishery) to the majority of the tax-payers, should absorb the entire solicitude of a state to the detriment of the more important sources of the national food supply. This naturally leads us to investigate the coast fishery, the result it produces, and the mode of life of the population that carries it on.

## CHAPTER XI.

THE DUTCH COAST — SCHEVENINGEN — THE FISHERMEN — HABITS AND DRESS — MORALITY — FISHERMEN'S WIVES — CONJUGAL SCENES — FRESH FISH CATCHING — THE DUTCH BILLINGSGATE — PAY OF THE FISHERMEN — PUBLIC CHARITY — THE STEURHARING — VALUE OF THE FISHERY — POVERTY OF THE FISHERMEN — CULTIVATION OF THE DUNES — KATWYK — EXCESSIVE CAPTURE OF FISH — CLOSE SEASONS FOR THE SEA — THE BAD SYSTEM OF MONOPOLIES.

THE coasts of Holland are marked by chains of dunes which conceal the sight of the water from the traveller. After a long and fatiguing ascent of these sand hills you look out, and lo! the sea is there. This Northern sea was badly known to the ancients, who regarded it through fables and superstitious terror. Tacitus himself represented it as tormented by dismal winds and peopled by monsters. The truth is, that its coasts are tempestuous; the colour of the water is changeable, in the foreground it is a foamy yellow, resembling soapsuds; further on a fading green; and still further out, of an evanescent blue, which is blended with the undulating sky line. Large clouds from distance

to distance cast an oblique and gloomy shadow over this heaving mirror. No rocks or cliffs break the efforts of the waves; the sea rolls over a bed of sand it has formed for itself, and which it continually extends. The physiognomy of the Dutch coasts varies but slightly,—sand and then sand, water and water again, sky followed by sky. On the coasts, which produce a feeling of infinitude, stand several fishing villages, from the mouth of the Meuse up to the Helder. The most interesting of these villages are Scheveningen and Katwyk.

The Scheveningen beach is frequented during the fine weather by bathers. A pretty village, connected with the Hague by a road planted with trees, and a promenade in the shape of a wood, which loses itself in the dunes, receives during the summer strangers of all nations. It in everything evidences the vicinity of the ocean; the church, which is not inelegant, preserves the enormous skull and several bones of a cachalot whale, which was cast on the shore by a tempest in 1617. In the principal street leading to the sea, you find several dealers in shells. The sea, whose voice is audible, does not show itself till the visitor has his feet almost in the water. The sudden pleasure of surprise, and the grandeur of the scene there displayed, give a noble compensation for those graduated effects found on other shores. A fishing

flotilla, whose fly-boats are either hauled up on the sand, riding at anchor, or scattered out to sea, associates the image of toil with historic reminiscences. Here the ocean has a right to feel proud of Holland and the Dutch, for in 1673 De Ruyter defeated within sight of Scheveningen the English and French fleets.

This little village is the Cherbourg of Holland, and has witnessed royal exiles and misfortunes. It was a wintry January day in 1795; fishermen loaded the luggage in two boats, and from a carriage that stopped at the end of the village a man, wrapped in a large pelisse, and a lady carrying an infant in her arms, stepped out. This man was the Prince of Orange, and the child was the grandson of the last Stathouder, the future King William. In 1813 this beach saw again, and welcomed with shouts (for the French Empire had just fallen), the representative of the same family who is now seated on the throne of the Netherlands.

If you continue your walk to the right, through the sands, you come to the Bath-house, whither the inhabitants of the Hague proceed on Sundays to hear the band play. From this spot at nightfall, when the sea robs the sky of all its stars, there is a solemn and magnificent prospect. In front of this hotel I saw a display of fireworks on the water, the motive of which was naturally the burning of a

vessel. I have no great liking for rockets and Roman candles; but here the vulgarity was redeemed by the grandeur of the scene. The gloomy sea was the great attraction to me; and when I thought of the too real catastrophes whose picture imagination could recall in this artificial fire, the scene was not without majesty.

This high street, these games, baths, *cafés*, and hotels do not, however, constitute the whole of Scheveningen. You may have visited this place for several summers, and yet not know the fishing village. Behind the elegant houses are concealed narrow lanes, poor niches of brick, in which a silent and wretched population stow themselves away. At the door of these rookeries, before which linen, nets, red shirts, and rows of fish strung on a cord are drying, now and then appears the sad face of a woman, aged and thinned by fever. The children sport amid all this distress, as if it were one of the privileges of their age to be ignorant of misfortune and poverty.

The population of Scheveningen amounts to 6800, of whom 450 are Catholics. It must be noted that most of the hotel-keepers and fish-dealers profess Catholicism; while the owners of vessels and fishermen are of the reformed faith. There are in the village two governmental schools which we visited, and which are kept in splendid order. The first, to tell the truth, is only a refuge

that receives 250 children of both sexes. They leave this primary school at the age of six, and then enter the other, which contains 600 pupils. The instruction is imparted by a head master, four under masters, and five monitors. The children are taught reading, writing, arithmetic, geography, and a little history, and leave this second school between ten and twelve years of age, for the sea claims their services.

Every fisherman's son becomes a fisherman; skillful, intrepid, and having, so to speak, sailor's blood in his veins, he soon acquires the art of steering a boat and casting a net. By the age of sixteen he has fully learned his trade, but this new training effaces his school education. Of what they learnt in the class these children only retain a knowledge of the alphabet, which they employ to read the bible. It is very rare to find a lad of twenty who knows how to sign his name in the marriage register. Ignorance is the first feature of the fisherman's character, and this ignorance is connected with a tenacious attachment to the customs and traditions of the past. They act in all respects as their ancestors acted. The maritime population of Scheveningen does not associate with foreigners; and under that term we must comprehend the Dutch themselves. One of these, a native of Rotterdam, who had been settled for twenty years in the village, told us that he was

still regarded by the fishermen as a man of another country. The originality of this race is sheltered behind language, garb, habits, and manners, as an insurmountable barrier.

The language of the fishermen is a species of patois, differing essentially from the ordinary Dutch, and in it some linguists have fancied they can discover traces of Anglo-Saxon, which appears to have been the root of the national idiom. Their garb is peculiar, especially that of the women, who wear, during winter, a boddice of serge or calico, a petticoat of brown serge, and a long cloak of the same stuff and colour, lined with red, and having a stiff and straight collar. This dress has something austère and cenobitic about it, but we are bound to consider that it is well adapted to the climate and calling. A large hat of coarse straw, trimmed with black ribbon, lined with flowered calico, and raised before and behind in the shape of a boat, enables them to carry on their heads from three to four baskets. These women have a robust nature, are of great height, and have tolerably pretty faces, blue eyes, whose lids are but slightly parted, and powerful limbs. At the age of thirty they have already lost much of their freshness; their skin is rough, doubtless owing to the vicinity of the sea, and their dwelling among the dunes. The latter form a country within the country; the sand reflects the sun-

beams very powerfully, and it is the Arabia of Holland.

The men are relatively of short stature, and their garb, consisting of a black jacket and trowsers, does not improve their appearance, which is grave and heavy. They have round faces, short necks, and hair generally brown and curly. Their great luxury consists in silver studs and buckles, which they fasten on their feet or on their belts. This persistency in attire, especially in that of the women, this fixity of physical features, and this character of race which is preserved by the care which the boys and girls of Scheveningen take to intermarry, may be, perhaps, the consequence of the traffic with the sea. Ocean, in which some poets fancy they have seen an image of inconstancy, is, on the contrary, as Byron has very correctly remarked, an image of eternity; of all the elements it is the one which has undergone the fewest vicissitudes since the origin of the world. Such as it now is creation saw it at its birth. It may move its place, but does not change; it opposes its mobile stability to the power of man; it undermines rocks, alters the level of continents, and transforms living nature and human destinies.

The manners of the fishermen dwelling on the coast participate in the character of the ocean; they have none of the habits of towns, and the basis of their character is independence.

Scheveningen supplies hardly any servants, for girls and boys are equally unwilling to go into service. It appears as if communion with the sea developes the feeling of human dignity. The fishermen will not have masters; poor but free, they recognise no authority, and will not even obey the owner. The master starts at his own hour, and when he thinks proper; and the crew follow him, not through subordination, but a feeling of duty and necessity. The fishermen shun military service, and resist the conscription; it is not the danger attached to the profession of arms they detest, but the discipline. The grandeur of military life does not conceal from them its servitude. These men do not like the land; they need space, the free immensity of the sea, the invincible waves, the sky, blue by day, star-spangled at night, the fresh northern breeze, and the consciousness of a man standing upright on his actions. Soldiers of toil, they like to brave voluntarily the lightning flash, the angry snorting of the waves as they dash along unbridled, and the foam that breaks round their keel. On land they suffer from nostalgia. Strangers to social conventionalisms, they will be neither regulated nor protected; and this feeling of independence is visible on their faces. The sailors and fishermen are distinguished from other men by the way in which they carry their heads erect in walking.

It was for them, we might say, that the Ovidean line was written: *Os homini sublime dedit.*

This love of liberty extends even to their religious belief. The fishermen of the coast, as we have seen, are nearly all Reformers; they only recognise two books as having a right to speak to them of duty, the Bible and the Sea. It seems as if ocean exerts a moral and sanctifying influence over them, for intoxication is rare among the fishermen of Scheveningen, and those even who drink gin to excess on land abstain from all intemperance when aboard. When at sea oaths are unknown, for maritime life exalts in these simple and ignorant men the religious feeling. When a fly-boat sets out each fisherman generally takes his Bible with him; no meal is eaten without prayer, and it also ends with returning thanks. On Sunday, if the men are at sea, they abstain from fishing; if ashore, psalms may be heard from their little houses at an early hour.*

This religious feeling is expressed in a thousand instances; but the other affections of the soul, such as brotherly affection and conjugal love, are but slightly displayed. Men and women have known each other from childhood, and habit may, perhaps, deflower the tenderness of their domestic

* Any one acquainted with the Manx fishermen will remark the striking affinity between them and these Dutch sailors.—L. W.

relations—but has not this indifference another cause? The hearts of these men are occupied elsewhere; they love the sea; that is their betrothed; their mistress. It is capricious, inconstant and terrible; but it pleases them so! You should see the Scheveningen fishermen walking idly along the beach in rough weather: the glance they direct on the sea expresses a sort of furtive passion: it is the glance of a lover at an irritated woman. This affection of theirs never grows old: you meet on the sands old fishermen whom age keeps ashore, but who are never weary of contemplating the tumultuous mass of waters, the sails skimming over the depths, and the flock of clouds driven by the wind. These patriarchs of the sea are revered by the fishermen, who generally display a great respect for old age. When death arrives, they greet it with a calm and resigned face, like an old acquaintance they have seen pass more than once above their heads in the howling of the storm. Cold and inanimate, they repose at no great distance from the waves they subjected—by the side of that sea which is troubled as time, and yet stable and impassive as eternity.

The women's affections, also, are but slightly expansive; and yet, in spite of this apparent placidity, it frequently happens that they have a child before marriage, though it is almost unexampled for a girl in a state of pregnancy to be

deserted by her betrothed. Thus assured of the constancy of her lover, the girl-mother is not grieved at her slip; she presents herself without a blush before the civil officer, and her glance seems on the contrary to say: "You see that I was not mistaken." The boys and girls marry at a very early age, and conjugal infidelity is rare, especially on the part of the husbands. The wives are extremely industrious, and make up by their activity, to some extent, for the husband's scanty wage. The trouble they take in selling their wares is extraordinary, and when they cannot obtain money for them, they practice the exchange system. You may see them returning to Scheveningen in the evening, with bread, wood, and vegetables, which they carry proudly on their heads in the same baskets in which they took out soles and shrimps. In their houses either extreme cleanliness or repulsive dirt prevails: but when found, the dirt must be placed to the account of wretched poverty. Seven or eight persons sometimes sleep in one room, or more correctly, a dark hole, where we should be sorry to lodge domestic animals. Twice the cholera has visited these poor cottages, and entailed frightful ravages.

In the fishermen's households, quarrels are almost unknown: it is true that the wife is the head of the house, and owes this domestic supremacy to the superiority of her acquirements.

More civilised, more intelligent, though perchance less moral, she proves herself in everything the mistress of her husband, who follows her advice, we might almost say, obeys her orders. These lovers of the sea, who brave with a species of contumacy the greatest dangers aboard their frail vessels, let themselves be guided like lambs by the hands of their mates. Although the feelings are generally silent between the couples, you may at times notice interesting scenes of conjugal love. I remember one day when the sea was not irritated but in a bad temper, a group of women were standing on the dunes exchanging signals with the crews of some dozen boats which were on the point of starting. From the group, among which there were children, a young woman stepped forth, holding an orange in her hand. She shouted some words, which the noise of the wind and waves prevented from reaching their destination: but the voice of love was stronger than that of the sea, for a sailor leaped overboard from one of the boats and walked through the water, which came up to his middle, to receive from the hand of his wife this simple pledge of affection. A moment after the anchors were raised and the little flotilla was scattered over the sea; the group of females remained on the dunes, exchanging a parting farewell with their husbands, and then returned silently to the village.

The coast fishery is divided into two distinct branches: (1) catching fresh fish, and (2) catching herrings for smoking, or *steur haringe*, and we will direct our attention to the former branch in the first instance. Scheveningen can send to sea 112 ordinary and eight small fly-boats. Each of the former costs from 5500 to 6000 florins, and is the property of an outfitter, who in some cases is only agent for other parties. When the owner wishes to fit out his boat, he selects a master, that is to say, an old sailor more capable and experienced than his comrades, and this master again selects six men and a boy. Annually the fishermen of Scheveningen have to make at the police office a declaration, consisting of the simple formula: "I am engaged aboard such a boat, and under captain so and so." The outfitter gives annually to the men of his fly-boat for catching fresh fish, one net and a half, two cables and a half, and some cordage: the rest of the nets and cordage is provided by the fishermen. The crew must also victual themselves. The cost of repairing the boat is divided between the owner and the sailors: all above the *klamp*, that is to say, all the vessel out of the water is repaired by the crew, while the part in the water concerns the outfitter. A motive, more or less logical, is given for this division of responsibility: the part submerged wears out, while the other that is above

water is often deteriorated by neglect. The sails are supplied by the outfitter. In catching fresh fish the fly-boats generally make but short trips out to sea, and the produce usually consists of soles, flounders, and plaice, which are caught in rope-nets called draw-nets (in Dutch, *sleep netten*), which open in the water like a ditch. One mode of fishing has ceased on the coast—catching cod and whiting with a line. The nets are generally cast during the night.

All the fish brought in by the fly-boats is sold at Scheveningen. The market is held on the beach, and these *frutti di mare*, spread out on the sand, are bought by the village dealers. The sale is effected by means of an order, which is presented to the outfitter, and money is refused, for that is a mode of exchange too slow on the beach, which at such times offers a striking and lively scene. The fish bought by the Scheveningen dealers, who are about fifty in number, is conveyed to the Hague in small carts drawn by dogs of a very ferocious aspect, but as zealous in their work and as proud of their office as the best poneys. At night the dealers, male and female, occupy the place among the baskets, left vacant in the carts by the sale of the fish, and are drawn home by their humble team.

A fly-boat which sticks to catching fresh fish from February to the middle of August, brings in

2000 to 2500 florins. The profits are divided in the following manner :—the outfitter first takes 20 per cent. of the gross revenue, and the rest is divided between him, the master, and the crew. The master receives one-fourth more than the rest, and the owner as much as the crew. Moreover, each time a fly-boat returns from the fresh fishery, the small soles, or *pitermans*, belong to the fishermen, who hand them over to their wives. This division is far from satisfying the sailors; as a general rule they detest the outfitter, and when an opportunity offers to cheat him, they do not let it slip. Crafty beneath their ignorance, and slightly deceitful under a coarse appearance (for we must put the shadows in the portrait), hostile to everyone who does not belong to their village and calling, they readily put in practice the maxim of the fabulist, "Our master is our enemy." The commonest fraud they indulge in is selling at sea fresh fish, and not accounting to the owner for this additional profit. But their apology lies in the dangers they incur, and their extreme poverty.

They are, it must be allowed, intrepid sailors, and the sea has no fury to terrify them with. Sometimes they sail to the English coast in one day; in rough weather all the openings are closed, and the tossed-about vessel holds its own as well as it can on the precipices of the ocean. Six or eight fly-boats, have been lost during the last twenty

six years. During stormy weather the women run to the dunes; they gaze silently, with saddened faces and fear-chilled hearts, on the mass of furious water, which may swallow up a husband or brother. The outfitters are insured, partially at least, against sea-risks, but the fishermen are not so, and their sole hope is in public charity. There is certainly at Scheveningen an asylum for orphans, but its resources are insufficient to offer a relief to all the misfortunes the sea produces. On the day after a maritime catastrophe, you must see the poor inhabitants of Scheveningen in order to form an idea of the sorrows of a life on the coast.

The fresh fish capture makes way, at the end of summer, for that of the *steur-haring*, which begins in the middle of September and ends about December. For this second fishery all the expenses for food, nets, rigging, &c., are defrayed by the owner, who receives the whole of the take. In return he pays each sailor 2 florins 80 cents for every hundred florins gained, and the captain receives half as much again. Each fly-boat is manned by eight men, who, on returning from the herring-fishery, receive in addition a present of from 12 to 20 florins from the outfitter. The material results of this fishery, as relates to Scheveningen alone, are considerable. In 1853, the fishermen brought in 18,194,500 herrings, which produced

218,915 florins. In 1854, ninety fly-boats were out for three months; five made four trips to the English coast; twenty-eight, three trips; fifty-two, two trips; and seven only one. The fishery was not so productive as in 1853; but these ninety fly-boats brought back 11,729,000 herrings. Seeing these figures, we may feel surprised at the poverty of the coast fishermen; but this misery, which forms such a contrast with the economic results of their labours, is only too real; of every hundred fishermen, ninety-eight are poor. In winter, bread and soup are given them; but formerly, as a civil officer of the district told us, they died of hunger. At Scheveningen there are 3530 persons who receive assistance at home from the Calvinist community. This crushing poverty results from causes worth noting. In the first place, the wages of the fishermen are small, as at the most they only gain from 4 to 5 florins a week. Such a result is in no ratio to the labour, and it forms a sorrowful exception to the law, which declares that those industrial trades, in which a man risks his life, should be paid accordingly.

The fishery is, besides, subjected to periods of suspension. In December and January the fishermen will not cast their nets, for they say that storms are more frequent then than at other periods of the year. It is extremely desirable (and it is, perhaps, the best remedy for pauperism) that the

coast population should not depend exclusively on fishing. Already some of the Scheveningen sailors make winter trips to carry articles of food to London, France, and Belgium, while others clear a portion of the dunes. This cultivation of the dunes is one of the characteristic features of the coast. When it is determined on to convert a certain extent of sand into arable land, domestic animals, and most frequently sheep, are turned out to graze on it for the first year. In the following year the plough is introduced, and the ground levelled. The enemy of this growing cultivation is the wind; dykes, and sometimes plantations of shrubs are opposed to it. The embryo field is then manured with any article nearest to hand, most frequently fish. This done, potatoes and other vegetables are planted, which do well. On seeing these fields gained from the wild dunes—these *chefs d'œuvre* of human creation—you feel an admiration mingled with tenderness for the patience and industry of these poor people.

If we follow the sea from Scheveningen, we shall find at Katwijk, Noordwijk, Egmond, and Zandvoort, the same coast, the same race, the same wretchedness. At the period when we visited the fishermen's village of Katwijk (for there are two villages of the same name situated side by side) typhus prevailed. For some years past the capture of fresh fish at Katwijk has been decaying,

and at the sight of this deplorable situation some economists have asked whether the use of drift nets has not impoverished the seas. This question is connected with another belonging to natural history. Fecundity was given to animals, and specially to fish, to enable them to resist human enterprise, but in what limits is this resistance offered? in other words, is it possible to depopulate the seas? Science does not hesitate to declare in the affirmative. The field of submarine life is an inexhaustible source of riches, so long as the reproductive forces remain in a state of equilibrium with the means of mechanical destruction; but from the day when that balance is broken, there is reason to fear that within a given time the most populous waters will be converted into solitudes.

Our century has seen an ingenious art spring into existence, which proposes to repeople the waters by means of animal spawn subjected to the will of man. We only ask, whether it would not be better to prevent by wise measures the annihilation of fish, than be reduced one day to reanimate the waters by artificial means.

Is the danger of an impoverishment of the seas to be apprehended? To judge of the fact, we need only look at the nets—those floating sepulchres, whose mouth is widely opened to devour the denizens of the water, and whose weights drag and stir up the bottom of the sea. Not alone are

all the fish the net meets with carried off, but even the spawn that may be in the ground is destroyed. Consequently it has been proposed to prohibit this fishery during the winter season. The principles on which such an interdict would be founded are unassailable ; for the riches of the piscine kingdom constitute the capital of the seas, and this capital belongs to the whole human race. Present generations have no right to destroy the fund, they can only receive the income. The State, whose duty it is to watch not only over the interests of the present, but those of the future, is, therefore, justified in protecting the prolific sources of the sea against dangerous means of exploitation. Still, as the foreign fishermen drag the same nets off the Dutch coast, it would be necessary to obtain an international convention which, on behalf of the interests of the fisheries, would protect the sea being plundered. The question is one worthy of reflection. Governments hold congresses to regulate peace or war ; what harm would there be in having social congresses to preserve and increase the alimentary resources of the peoples ?

Although suffering, the coast fishery is a considerable source of wealth to the Dutch. Without any protection, and even impeded by the regulations which hitherto favoured the great fishery to the injury of the other national fisheries, this industry has struggled with the greedy forces of

nature, and attained results which deserve our attention. In 1850, from February 1, to September 5, forty-eight fly-boats caught on the coast of Katwijk 78,902 florins' worth of fresh fish, while in 1853, thirty-six fly-boats brought in 6,096,000 herrings. In addition to the vessels leaving the ports near the Meuse, 218 boats manned by 1744 men, cast their nets in the sea that bathes the provinces of North and South Holland, the annual expenses for each vessel amounting to 4,500 florins. This capital floating on the water doubtless has a value, but the labours of the men who struggle day and night against all the forces of ocean, represent another value no less great or fertile.

The North Sea is not the only field ploughed by the Dutch boats: there is another and more obscure fishery almost too despised, but whose silent development deserves the notice of the economist: it is that practised on the Zuyderzee. In this gulf, formed within historic times by the invasions of the sea, we shall meet with a fresh series of facts, which will supply us with new weapons against monopoly, and decisive arguments in favour of free trade in fishery.

## CHAPTER XII.

THE ZUYDERZEE—A MARINE NYMPH—HOORN—A DESERTED TOWN—THE ISLAND OF MARKEN—MINIATURE BOROUGHS—INTERIOR OF THE HOUSES—HAYMAKING—PRIMITIVE MANNERS—QUAINT ATTIRE—URK AND SHOKLAND—DANGEROUS STATE OF THE ISLANDS—A WARNING INUNDATION—LOSS OF COUNTRY—THE FRESH HERRING FISHERY—SPRATS.

THE Zuyderzee forms, as it were, a basin of the North Sea: just as years enlarge the waist of a maiden, ages have widened the gap by which the sea rushes upon the land. The mass of water occupies at the present day a space of fifty-four square leagues, and it advances into the provinces of Friesland, Overyssel, Gelderland, Utrecht, and North Holland. In summer the shores of the Zuyderzee are delightful, for a girdle of towns and villages, connected together by prairies, gardens and country houses, softly encloses the outline of the gulf. These old towns live more or less from navigation and fishing.

On leaving Amsterdam, if we follow the left hand side of the basin, we come first to Moneken-

dam, which owes its name and probably its origin to an old monastery. A steeple or tower, brick houses picturesquely grouped, masts of vessels and sails of fishing boats, are the principal features of this town which emerges from the waters, like the antique nymph, with a crown of verdure. Talking of nymphs, here is Edam, another town of North Holland, to which a local legend attaches. After a fierce tempest which had mingled sky and sea, and the waters, impelled by the furious winds had broken down the dykes and invaded the plains, the girls of Edam, when taking their kine to drink in the Purmer lake, perceived a female dressed in a garb of greenish moss swimming on the surface of the water. At first the novelty of the spectacle startled them; but when they had slightly recovered from their emotion, they caught the sea-maid in a net and conveyed her to Edam. There she was cleansed of the mud and moss which covered her: attired in garments more suited to the modesty of her sex, she learned to eat bread and knit; but a natural inclination riveted her to the waters of the lake. She spoke an unknown tongue, and understood nothing of Dutch. A grave chronicler, Snoyus, declares that he has the fact from eye-witnesses; and he refutes the opinion of those who, through an inclination for the marvellous and chimerical, gave this maiden a fish's tail. And now, if you doubt the story, look, when at Edam,

upon the old bas-relief preserved on one of the walls of the town. You will see there the authentic portrait of this marine nymph in a state of nature. Her form is beautiful, and causes us to regret that the species is not common, if the other daughters of the sea resemble her.

From Edam to Hoorn the coast is rounded and pressed in to form a promontory at the point of which Enkhuisen is built. The town of Hoorn derives its name from the bent shape of its port, which advances into the water like a bull's horn. Such a configuration is in itself a symbol of the pastoral manners of North Holland and the natural wealth produced there. Hoorn, with Alkmaar, is the greatest cheese and butter market existing in this country. Surrounded by rich pasturage, this town rises at once from an ocean of verdure and an ocean of water. Once a year, the high street, filled with six or seven thousand head of cattle, offers a curious and animated sight. Over one of the gates of the town, we admired two finely made bulls, while lower down is a kneeling woman milking her cow. Dutch art is perhaps the only one which has celebrated domestic labour, instead of rendering murder poetical. When I visited Hoorn, the girls ran about the streets at nightfall with candles wrapped in coloured paper; this custom, whose origin is unknown, reminded me of the Chinese feast of lanterns. This amusement lasts

for a week, and the inhabitants appear to find extreme pleasure in it.

This old town, seen by the light of these wandering candles, is not without character. Very pleasant are its houses tottering and bowed like a drunken man, its wooden awnings, its canals filled with salt water, and its town-house, a handsome building dating from 1615, and restored with much taste. A stout dyke protects the town from surprises of the sea, which, in spite of this defence, entered one of its streets in January, 1855. The port is frequented by merchantmen, which convey not only to the Netherlands, but also to Belgium, France, and, before all, England, the agricultural wealth that pours from the town as from a cornucopia. About two hundred fishermen, mostly dwelling in hovels, live at Hoorn on the fruits of the sea. We are here in the midst of those nets which bore so high and so far the ancient prosperity of Holland, for the history of the fishery is closely connected with that of navigation and maritime discovery. People do not know sufficiently the influence of this useful art upon the knowledge of the globe, by creating skilful and intrepid sailors, the seekers after new worlds. Hoorn was the birth-place of the navigator William Schouten, who in 1616, doubled the most southern point of America, to which he gave the name of his native town. Hence we ought to write Cape Hoorn.

From Hoorn to Enkhuisen, we pass by land through a chain of villages far more curious than Brock, which is after all only a theatrical decoration. Neat houses, half of wood and half of brick, some covered with tiles, others with a coat of quaintly cut thatch, stand by the side of a road planted with trees. It is said here, that doors are not made to enter houses or to leave them. These gilded, carved doors, frequently painted of different colours, are ornaments, *hors d'œuvres.* They are only opened on the three great solemnities of the domestic hearth—birth, marriage, and death. At all other times the house is entered from the back. When they are plain, these houses are far from unpleasing, but too often a faulty taste disfigures while trying to embellish them. Here the mania for cleanliness even attacks nature; the trees that border the roads are painted white; or wear the colour of the house, in front of which they rise like a wall. These trees appeared to us astounded and slightly confused at their toilet; but this must be an illusion on our part, for does any one in the world ever consider himself ridiculous?

By such a road Enkhuisen is reached, which was formerly a flourishing town.* In the 16th century it sent to the great fishery a fleet of one hundred and forty boats, protected by twenty ships of war.

* Old geographers derive the name of this town from the herring: *Enchusa quasi harenchusa, priori syllabâ truncatâ.*

Its port, its buildings, its dockyards, and salt factories, were generally admired; but now, what solitude and decay! One of the old ports of Enkhuisen is at present a mile from the town, and the grass has effaced all signs of houses. Sheep of apocalyptic leanness browse on this fallen town, which will soon be but a ruin—its very streets weep. Walls which the wind crumbles away, old houses with stone escutcheons which no longer find inhabitants or fortunes to fill them, male and female faces worn and sepulchral,—all this unfolds a chapter of history which might be entitled, "How Towns die." It was especially at the approach of night that this scene of desolation and decay impressed me with an undefinable sadness. The sea was black beneath a moonless sky, and at every moment the lightning lit up the gloomy water. This spectre of a town bending over the sea was sad to look upon, and reminded us of an old Northern legend: a maiden who was proud of her beauty and died on the eve of her marriage, as a punishment for her pride and coquetry, received leave to return on stormy nights and admire herself in the sea between the flashes of lightning.

We will pass over Midenblik, Harlingen, Workum, and Kampen, which only offer a secondary interest, at any rate from the fishery point of view, and visit the inhabitants of the isles, who live exclusively by casting their nets in the gulf.

Opposite Monikendam is the little island of Marken.*

A sailing boat conveyed us to the island in less than an hour with a favourable breeze; but this hour places ages between the inhabitants of the isle and those of the continent. The entrance to the port is narrow, but they have not dared to widen it, through fear lest the pressure of the water might cause disasters with a north-west wind. Formed in 1834, and improved in 1853, this port is in other respects excellent; and fishing boats lie in it side by side. When you land, you find yourself on flat and level ground, flush with the sea, and protected by a dyke of circumvallation. On the surface of this plain rise mounds made by human hands, on which stand the groups of houses

* The origin of this name has considerably perplexed antiquaries. Some assert that the population of this island is derived from the Marsatii, who are mentioned in Pliny and Tacitus. These Marsatians formerly occupied a nook of land in Lake Flevo. The island of Marken was separated from the continent at the beginning of the 13th century, when it formed an estate belonging to a Friesland monastery. It was then a most pleasant country, covered with magnificent gardens kept up by the monks. At first the separation between the isle and the continent was but a few feet wide, and it was reached by a wooden bridge; but gradually the fissure became enlarged; fertile plains were undermined by the water, and the peasants were transformed into fishermen. The present state of this island is but little known to the Dutch themselves; the arrival of a stranger is an event; he is regarded with surprise, as if he had dropped from the moon, but not unkindly treated.

dignified with the title of boroughs. The traveller can thus examine the building process employed by the first inhabitants of Holland to defend their abodes against the water.

These boroughs, eight or ten in number, one of them being composed of only six cottages, have all names, some being pretty enough, as for instance, the "tower of fire," the "borough of roses," &c. The houses are built of wood, some being painted, others tarred, and covered with tiles or thatch. Most of the villages are alike, but there is one distinguished before all by the luxury of its buildings, and which is here called the capital of Marken ; it is Church borough. The pastor's house is built of stone; a wooden sundial, a fruit-garden composed of four large trees (nearly the only ones existing on the island), shutters to keep out the rain and wind,—surely all this is enough for the inhabitants to consider this abode an ornament of which they have a right to feel proud. Near the pastor's house stands the church, next the church the school, and not far from the school the Town House. The church is a new edifice, rebuilt in 1846 with a zinc roof ; but the water has already penetrated to the interior, which requires extensive repairs. The inhabitants of Marken, 950 in number, all profess the Reformed faith From the roof of the church are hung two models of the old fishing-boats formerly employed in the island, and these historic monuments of navigation are

well placed in the Christian temple, in the midst of the reminiscences of a religion which began in a fisherman's boat.

The school receives two hundred children of both sexes, who learn the elements of natural history, geography, and arithmetic. The pedagogue, who is a native of the island, honours his humble duties by the kindness with which he acts a cicerone to strangers. In the principal street of the capital of Marken we were shown the burgomaster's house, which is only distinguished from the other houses by an air of ease and cleanliness. Formerly Church borough was not paved; it was Paris before Philip Augustus: planks were laid here and there during the winter on the low and marshy soil, but at the present day the state of the roads is much improved. The inhabitants, from time immemorial, have effected a passage from one house to the other by small piles of earth. This organisation of the roads, these mounds, and these small uniform houses, give the boroughs of Marken the air of a city of beavers, those first inhabitants of Holland, according to the ancient traditions of universal history, and which have now disappeared before the establishments of man.

The interior of the houses deserves our notice. Most frequently the same room serves at once as bedroom, kitchen, and storehouse for the fishing utensils. Some houses, however, have a second

and separate room, called here the saloon, in which furniture and clothes are kept, but that is almost aristocratic luxury. The rooms, which are flush with the ground, have no ceiling, and communicate with the garret, over which the tile or thatch roof rises at right angles. The houses are equally deficient in chimneys as a rule, but before the principal window there is a large flat stone surrounded by a row of bricks. A piece of iron is fastened at the back of this stone, against which the fire is kindled. An opening in the roof allows exit to the smoke, which, before emerging, spreads through the loft, where the nets are dried. Only thirty houses are remarkable for possessing chimneys. Several times a year the interior is cleaned and whitewashed. A table surrounded by very low chairs, an old escritoir loaded with pretty china, an eight-day clock, milk tubs, whose copper rings shine like gold, produce in the houses of the island an alliance of facts rarely found among other races, namely, of cleanliness with poverty. This taste for china, old glass, curtains, and flowered counterpanes, is a delicate feature in the Batavian character. Art sits down by the side of misery at the fireside, which it enlivens with a consolatory beam. There is, besides, so much peace in these modest interiors, so much ignorance of the wants that civilisation develops, such indifference to wealth and luxury, that a man

would like to live there, could he but forget his time. Wretchedness is not, as certain Utopians educated in the school of Jean Jacques Rousseau believed, the consequence of society; it is, on the contrary, an annex of the barbarous state, a primitive fact against which society is called so incessantly to re-act. The islanders of Marken have remained, through their isolation, at the starting point; but as everybody in the island is poor, or nearly so, the poverty is not noticed. On the road we were shown the house of a rich capitalist, who invested his money in trade; it was simply a hovel.

When we visited Marken, the women were engaged in haymaking. The men do not interfere in this work; they content themselves with steering their flyboats on the sea and casting their nets. The crop was conveyed by barges along small canals communicating with a central one, called the Great Island Canal. From time to time the bridges were cleared, or what are called so here, that is to say, planks, which turn, and over which the inhabitants pass to cross stagnant streams. The hay, when collected near the port, was loaded on board a species of vessel, called here the little Marken boat (*Markerbiunenschuitjes*), whose model exists nowhere else.

The soil of the island is a very fertile clay, and produces, in addition to hay, reeds, which grow in

great quantities, and are exported. The various crops produce 10,000 florins a year. The pasturage, properly so called, is used for feeding cattle. There are in Marken five peasants; the Dutch give the name of *boër* less to the man who cultivates the soil; than to him who breeds cattle. On the island there are twenty-two cows, and about 300 sheep, but we saw no horses. As most of the wells are brackish, the inhabitants give their horned cattle rain-water, which they also drink themselves. It has been calculated that 3000 sheep could be fed on this island, which would produce considerable profit for the poor inhabitants, but the fear of inundation has hitherto prevented the development of this industry. The inhabitants of Marken are still in the earliest stages as regards social science, and among them division of labour does not exist. All do the same thing, or nearly so; they live by fishing. As for trade there is hardly any; potatoes, vegetables, manufactured objects, and peat, are brought every week from Monikendam, Hoorn, or Amsterdam. There are only two bakers on the island, so that a great quantity of bread also arrives by water. Men, adolescents and veterans, are nearly constantly on the sea; formerly they took a considerable part in the great fishery, but they have nearly given it up. On the other hand, the number of flounder-catchers has greatly increased; at the end of the last century there were

only eighteen boats employed in catching flounders, while now there are ninety. The house belongs to the wife; but the flyboat, the external house, belongs to the husband. He displays the same coquetry and zeal in adorning this floating abode as his wife does in cleaning the cottage; and on Sundays and holidays the fishing-boats collected in port seem rather a squadron of yachts arranged for the pleasure of the eye, than a fleet of toil and utility.

There are a few other branches of industry on the island, but they too live by the sea. We were shown a sail factory, and also visited two carpenters' shops employed to build the wooden houses—both those that remain at home and those that go into the water. In one of these workshops two children, about twelve years of age, were amusing themselves with making a little boat; here the lads play with flyboats, as young ladies elsewhere with dolls.

The islanders of Marken have adopted a uniform costume. The men wear a cloth waistcoat, a carelessly but not ungracefully knotted handkerchief, gold buttons on their shirts, very wide breeches, black woollen stockings, and sabots. This attire of an Eastern style, and free and picturesque form, resembles that of the old Mamelukes, *minus* the turban. The women wear on their chest a species of woollen cuirass, decorated in

front with designs or flowers, and black or red behind, long red sleeves also of wool or striped muslin, a dark blue petticoat, and a white apron. Their cap resembles in shape the mitre of the old bishops. On either side the head is a bunch of light uncurled hair, which by the brilliancy of its colour reminds us of the epithet given to the ancient Batavians, AURICOMI BATAVI. This costume is the same for all, and consecrates by a visible trait the equality of social conditions. No distinction of rank or station is known in Marken; fashion is a word to which nothing corresponds; custom regulates through the year the changes, which at the most are very slight, that the toilet has to undergo. A more adorned garb is substituted for the ordinary dress on holidays, fairs, and weddings. At Marken you notice very few pretty girls, while many of the youth have interesting features. This contrast is noticed in all races which have preserved the natural state more or less intact, for it is civilisation that has created female beauty.

The character is as peculiar as the costume. The men and women marry between the ages of twenty-four and twenty-eight, and they are more anxious about age and inclinations agreeing than fortunes. What Tacitus says, in alluding to the manners of the ancient Batavi, is living history here; adultery is unknown. "The wife does not

espouse her husband, but marriage." Separations are extremely rare; within the memory of man only one was seen in Marken. The birth of a natural child is an event which does not occur once in twenty years. It happens, as among the coast fishers, that a girl may display signs of pregnancy before marriage, but from the moment she is in what the Dutch call a "blessed condition," the marriage at once ensues. Anyone who acted otherwise, an old islander told us, would not dare to look at the sea again. The sea, in fact, is the visible conscience of the fisherman, and he is anxious to prove himself honest and pure in its sight. Family life is exemplary, and, as the husband is absent a great part of the year, either sailing in the North to catch herrings, or engaged in the Zuyderzee in the sprat fishery, the education of the children devolves on the wife. This charge, which constitutes the first of her domestic duties, is performed with scrupulous vigilance. We shall be able to form an idea of the extent of her functions and the gravity of her moral burden, when we know that in these thatch-covered cabins there are often from nine to twelve children. The women also make all the clothing, even that of their husbands; they till the soil, spin the hemp for the rigging, and bleach the linen. In these labours and complicated duties the housewives are not assisted by servants, but do everything with their own hands.

The men are remarkable for great sobriety, and the inhabitants of the isle owe to these strict habits a relative state of prosperity, if we compare them with the fishermen in other localities. Although they have to contend with a thousand causes of pauperism, such as bad summers and early winters, they do not condescend to implore public assistance. Their temperance is also a cause of longevity, and you meet many old men on the island. At the sight of their faces, calm as the sea on a fine summer night, you grow to love this humble mediocrity, these poor people, rich in things they are ignorant of, and this family of fishermen who are so closely connected by a uniformity of labour, inclinations, and dangers.

The women hardly ever quit the island, the men, on the contrary, inhale the breath and life of the sea. The flounder-catchers enter their boats at midnight each Sunday; they pass the week in the gulf, and only return home on Saturday. The only day they spend ashore is employed in repairing nets, sacks, and tackle. Great dangers menace these indefatigable voyagers; the wave of the Zuyderzee is shorter and less tumultuous than that of the ocean, but it is perfidious. Their coolness amid dangers and storms equals their humanity; ever ready to help imperilled vessels, they have furnished proofs innumerable of their

courage and presence of mind. We accompanied the Zuyderzee fishermen in one of their nocturnal trips; the boat in which we were was manned by three men; in the bows was a small cabin with a glistening blue painted floor, a wooden chimney, a bed, a chest of drawers, and chairs, all painted of lively colours. This cabin was lighted by four or five square holes in the deck, covered with hatches, which were now removed, and through which we could see the stars glistening. In the open part of the boat were nets, poles, boats, one or two anchors with several flukes, and clumsy green painted sabots. One of the men held the rudder and watched the sails, while the two others cast the nets. The haul was tolerably good; the fish taken were thrown into the middle of the boat in a tank of salt water. We returned to land before day, the sail was lowered, the fishing implements put in order, and the mast was decorated with a huge brown net, in which the moon was caught like a bird.

The habits of the inhabitants of Marken are common to those of Urk and Shokland, with slight variations which it would be superfluous to indicate. These two islands lie on the surface of the water, and resemble a dream of the ocean. Tradition has it that they formerly formed one island, and between Shokland and Urk there is a strait generally known by the name of the cemetery,

where a few fragments of wall rise above the water, on which the fishermen have often torn their nets. The inhabitants of Shokland expect that the remnant of their ancient isle will disappear any day under the water. The prodigious works of brick, reeds, piles, and rock, by which it is attempted to sustain a rescued land, they say, only defer the fatal date. When we regard the position of the spot, we perceive that this fear is not at all chimerical. On the surface of the soil which the sea shakes, the houses tremble, and in rough weather the furniture inside them is thrown down. In 1825 it was thought that the sinister predictions of the islanders were about to be justified by a definitive catastrophe. The waters rose ten and a-half feet above the ground; the great dyke was destroyed for a length of more than two hundred yards; enormous oak piles were carried away like reeds; twenty-six houses disappeared, and men, women, and children perished. Out of fifty-one cows counted on the island in 1824, only four now remain, for the poor brutes drown themselves on dark nights and in heavy storms. The Shoklanders resemble the inhabitants of Atlantis; they feel the last days of the world are coming, for after all, this ungrateful island is their universe, and they see nothing beyond it. We ask ourselves, on seeing the expense incurred to defer a fated destiny, if it would

not be better to abandon to the waves a strip of marshy, doubtful land; but the inhabitants of the island would readily answer you, "Rags if you will, but my rags are dear to me." A trait of character common to all these islanders, especially to the women, is a deep attachment for the place of their birth. Their hearts are bound to this medley of land and water by the root of habits, tastes, and natural affections. In summer, when the sun warms the water and incites the grass to grow, we can understand this feeling; but in winter, when the darkness envelops Shokland, when the winds shake the dykes, undermined by the sea; when the lighthouse trembles like a candle in the hands of a child; when the tides mount and rush up like a pack of hungry wolves; when the shadows of the old submerged cities wander about in the tempests and groan—oh, then it needs a great illusion to adhere to this sad abode. A sweet blindness of heart characterises the love of country, as it does, indeed, all loves.

Economically regarded, the situation of the Zuyderzee fisheries, taken in their entirety, offers a serious interest. In these three islands, Shokland, Urk, and Marken, in spite of local causes of discomfort and wasting away, the population increases every century; it is even relatively developed more rapidly than in the rest of the country. This fact alone testifies that the sea is a

fertile field of production; for it is a law that populations increase according to the means of existence. Formerly the sturgeon and the salmon formed the greatest wealth of the Zuyderzee, but they have entirely disappeared at the present day. This is a new proof that fish do not always resist by their fecundity the attacks of man, and that fishing at all seasons in certain districts is like devouring the gifts of the sea in the germ. On the other hand, certain more obscure fisheries have attained considerable development during later years—for instance, that of eels produces a result of 40,000 florins per annum. These waters are also peopled with herrings and sprats. The herring fishery begins in October and lasts till the end of March; that for sprats is continued from May to July, by means of conical nets. This little fish, which is salted and packed in storehouses at Monikendam, Huizen, and elsewhere, is an article of trade of considerable importance. The sprat fishery of 1853 was estimated at 20,000 ankers, each anker containing 4000 Dutch sprats, representing a value of 200,000 florins.

The Zuyderzee herring is less esteemed than that of the coasts; but it has the merit of serving as the food of the most numerous and poorest class. There is in the Zuyderzee a late-season herring, known by the name of *pan haring*, on which the

Dutch set. but little store, which is dragged in trucks about the suburbs of large towns, and has been long used for manure! The pan haring has avenged itself by gradually withdrawing from the shore where so little justice was rendered to its good qualities. The fresh herring of the Zuyderzee does not at all deserve the contempt an old national prejudice has cast on it. A few years ago French fishing boats put into the Dutch ports and fraudulently purchased this fish, which was sold cheaply. Such a business was successful, and the number of boats soon amounted to 390, but the French government took measures to repress this equivocal trade, which died out.

The contempt the Netherlands display for the fresh herring of the Zuyderzee emanates from the esteem in which they hold the herring of the great fishery, an esteem doubtless justified, but much too exclusive, and which has hitherto contributed to depreciate a fertile branch of the national industry. It must not be forgotten that fish is too often the poor man's food, and hence, despite the interdict hurled at it by the higher classes, the Zuyderzee herring, which has long been a victim to the preference accorded to its elder brother, is striving to regain its rank in the scale of maritime produce. The fresh herring fishery, so long placed without the pale of the law, and deprived to some extent of its right of citizenship, is progressing,

while the great fishery remains stationary, if it be not retrograding. At Monikendam alone, the value of the fresh herrings sold by auction in 1850, amounted to £9000. This fishery is carried on with boats called *botters*, which leave the various ports of the Zuyderzee. The crew of each boat is generally composed of three men.

The Zuyderzee, it will be seen, offers a great scene of economic facts. A thousand boats, employed in catching fresh fish, go about night and day on this inner sea, manned by 4000 Dutch sailors. This sight is sufficient to justify our conclusions; when we speak of the Dutch fisheries, we must not isolate, as is so often done, the great fishery from the other branches of the same industry. All the branches have equal claims on the interest of the observer; moreover, they support each other: in the years when one declines another rises, and thus prevents the public fortune from suffering. Free trade will have the effect of placing these fisheries, to which Holland owes a portion of her wealth, on a footing of equal consideration. Even if we had to choose between them, at a period when no other solution has been found for the problem brought forward by modern society than to reduce want by multiplying the sources of production, we should not disguise our preference for that branch of industry which employs the

greatest number of fishermen, which represents a larger revenue in kind, which contributes more directly to the nourishment of the working classes, and which has never required to be supported by the State.

## CHAPTER XIII.

ORIGIN OF THE WHALE FISHERY—WILLIAM BARENDZ—UP IN THE ICE—SHIPWRECKED MARINERS—RETURN OF THE SUN—A FORTUNATE ESCAPE—THE BASQUES—RIVALRY WITH ENGLAND—THROWING OPEN THE TRADE—SMEERENBERG—SUCCESS OF THE FISHERY—WITHDRAWAL OF THE WHALES—ARCTIC COLONIES—RUSSIANS AT SPITZBERGEN—EXPERIMENTS AT ST. MAURICE—SHIPWRECKED ENGLISHMEN—STAVOREN—A LEGEND—HARLINGEN—DECAY OF THE WHALE FISHERY.

A COUNTRY which like Holland is connected by so many ties to the sea, was marvellously prepared for great naval enterprises. The ocean is to the Dutch a vast and continual workshop. We have seen the advantages they draw from the herring and cod fishery; another fishery, of a very different character, was developed at a later date with the Republic itself, whose destinies it raised so high; I mean the whale fishery. This great maritime industry is a perfectly new theatre of facts. The whale fishery differs from all others, both through the extent of the outfit it requires, the nature of the countries

visited, and the chivalrous character of the sailors who take part in it. The history of some celebrated expeditions in the Polar seas, the courageous efforts of various Dutchmen to establish themselves in those savage regions, where night succeeds night, and winter winter; the dangers of an heroic fishery; the manners of the mariners, who daily carry on their naval engagements with the greatest animal in creation; the recollections of an old naval lieutenant, who has latterly attempted to revive an expiring trade—all this, perhaps, does not form the least interesting page in the social history of the Netherlands.

The causes that gave rise to the whale fishery have not been sufficiently investigated. When the United Provinces shook off the yoke of Philip II., a spirit of enterprise took possession, with the feeling of independence, of this industrious and manly race. We must not, moreover, lose out of sight the fact, that then was the age of great maritime discoveries: the Netherlands valiantly entered on the watery path which was to lead the human mind to a knowledge of the terrestrial globe. A material interest was combined with this moral impulse: the Netherlands, before all, had to dispute with other European nations the Eastern trade. There were some reasons for believing at that time that a passage leading by the North Pole to the Indies and

China existed. This passage would have been even more advantageous to the Dutch than to the majority of other European nations, owing to their geographical position in the North Sea. With the view of this discovery, the United Provinces equipped in 1594 four vessels, which started for the icy regions. A portion of the expedition, under the orders of Cornelis Cornelisen, passed through Waigatz Straits, and advanced about forty leagues in an eastern direction; then, finding the sea free and open, they gave way so speedily to the hope of success, that instead of pursuing their discovery, they effected their return, announcing that the existence of a communication between the Polar and Indian Seas was possible. The other portion of the expedition, under the orders of William Barendz, one of the best pilots in Holland, cruised in the White Sea, and sighted the western coast of Nova Zembla. We are pleased to find in the mouth of these rough sailors, and on those desolate waves, a recollection of the mother country. "We cast anchor in a bay to which we gave the name of Lomsbay; it is thus we call in Holland a species of penguin, which we found there in great numbers." In the meanwhile the season was advanced for this severe climate; the floating ice packed, the crew began to murmur, and refused to go further. William Barendz returned.

The next year, 1595, Prince Maurice and the States-General, sharing more and more the belief of navigators in the existence of a passage connecting the North of Europe with China, equipped a squadron of seven vessels. The expedition left the Texel on July 2, and on August 17 doubled the coast of Nova Zembla. It next passed through Waigatz Straits, and the sailors landed on the north coast, but found neither men nor houses. On the south, they had some relations with the Samoeides. But the weather was cold, melancholy and snowy, and there was no chance of advancing further in the seas encumbered with ice. They were compelled once again to return to Holland, unable to bear with them the glad tidings, "We have found it!"

The confidence which had been placed in the calculations of the navigators was seriously shaken by these unsuccessful expeditions. The States-General would not renew an attempt which had entailed considerable expense, but they offered a reward to that company which opened a passage to China by the North East at its own expense. The regency of Amsterdam then chartered two vessels, and promised the crew in addition to the sum fixed by the States, which was 25,000 florins, a considerable reward in the event of success. The merchants of that city understood all the importance of such a discovery for the Dutch

commerce, at the head of which they stood. Jacob von Heemskerk commanded the expedition. William Barendz was pilot aboard one ship, and Vande Ryp master aboard the other. On May 10, 1596, these men who, after two futile enterprises, insisted on seeking a road through the unpassable ice, were watched departing from Amsterdam with considerable interest. To the doubts of their fellow citizens, the inutility of their first efforts, and the resistance of the elements, they opposed their courage and stoical hopes. They started, and on June 5 they met with the first ice, which presented itself in detached and woolly flakes, resembling, as their journal says, a flock of sheep or band of swans. On a small island, they found a great quantity of eggs belonging to a red goose, "which, in flying, uttered the cry, *Rot, rot, rot.*" These birds reminded the Dutch sailors of geese of the same colour they had seen in their own country. Every year they were captured in large numbers round the island of Wieringen; but it was not known where they laid their eggs. This mystery had given rise to a multitude of fables in natural history. "And that is not astonishing, since no known man had ever yet penetrated to this land, situated beneath the 80th degree, which appears on no chart, and where these birds hatch their young." While under weigh, these bold adventurers dis-

covered Spitzbergen. They next made futile efforts to steer eastwards, but the wind blowing violently from that quarter, drove them back, and brought with it immense blocks of ice. At each moment the ship was all but crushed by these moving rocks, which dashed against each other with a fearful noise. The rudder was broken, and the long-boat smashed by an immense iceberg. All hope was henceforth lost, not only of pushing on, but even of reaching Waigatz Straits again by the eastern coast of Nova Zembla. They then attempted to get back by the road along which they had come ; but the ice, of which they had previously counted four hundred blocks, soon united into a solid mass and enclosed the vessel on all sides. It was then that the luckless sailors resolved to leave their ship and resigned themselves to pass the winter there, "in a great cold, great wretchedness, and profound melancholy."

The crew then consisted of seventeen men, of whom the carpenter, one of those whose services they could least dispense with, died. Very fortunately for them, they discovered a very large quantity of drift wood, which came from an unknown continent. Had it not been for this help, their destruction would have been certain. With this wood they began to build a shelter ; "but the cold was so terrific," themselves say, "that when we put a nail in our mouths, as is the habit of

carpenters, it froze and adhered so tightly to the flesh that when we dragged it away the blood flowed." The journal in which these hapless men have left the detailed recital of their sufferings, and the means they employed to keep themselves alive, is full of a mournful, striking, and austere interest; not a murmur escapes from their lips, and a spirit of lofty and true piety, which was the general spirit of Dutch sailors in the sixteenth and seventeenth centuries, elevates them to a perfect submission to the designs of Providence. All, however, seemed to abandon them; on Nov. 4, 1596, the feeble beams of the sun, which had hitherto sent them light, if not heat, went out. Those voyagers who, since Barendz's expedition, wintered in the Arctic seas, have depicted in colours more or less gloomy the impression left on their souls by this death of the planet which animates and revivifies all nature. They followed it silently, they tell us, to happier climes where the same sun then bore its light; they mentally returned to the illuminated regions where their childhood had been passed, to their country, their homes, their family. How much more powerfully must such emotions, which are so natural and so painful, have been felt by the first witnesses of this long and formidable arctic night, especially in the distressed condition in which they found themselves!

We will not follow through all its interludes the nocturnal struggle they were compelled to wage with the homicidal rage of the elements. It will be sufficient to say that by means of the wood which the drifting ice brought them the sailors were enabled to light a fire and warm themselves; still they were compelled to seek this wood at a considerable distance, load it on sledges, and drag it through the snow and gloom under a cold so piercing that the skin peeled off their hands and faces. They had, moreover, to contend almost daily with Polar bears; but they supported all these trials with a patience and obstinacy worthy of their country. At length the sun returned. "On January 27, we saw it mounting in all its roundness on the horizon, which rendered us very happy. We thank God for the mercy He vouchsafed to us by restoring the light." The cold increased with the lengthening days, the frost became more intense, and the snow-storms more frequent. They were compelled to wait till June, 1597, ere they could repair their boats and render them fit to stand so long a voyage. They could not think of the ship, for that was completely beset in the ice. On the 13th June all was ready for the start. Before quitting this mournful spot, where the crew had made so long and so painful a sojourn, Barendz wrote a report which contained the names of his companions in mis-

fortune, and the journal of their life on this deserted island; then, after making a copy, he left this paper in the hut. Two open boats, the jolly boat and the yawl, repaired as well as weak and frost-bitten hands could effect it, were all that was left these unhappy men to make a voyage of at least 700 leagues, exposed to the violence of the winds, heavy rains, severe night frosts, and the collision of the ice-blocks, which, through the summer, dash against each other in these regions. They sailed thus "in the ice, upon the ice, and over the ice." To put the climax on their misfortunes, Barendz, in whom they placed their entire confidence, was ill, and they had been obliged to convey him from the hut to the boat on a sledge. The fatigues, privations, and horrors of this voyage augmented his sufferings. Hearing some one say that another sailor of the crew, Claes Adriansen, was in a desperate state, Barendz remarked, "I do not think that I shall long survive him." Then, turning to Gerrit de Veer, he added, "Give me something to drink;" but he had hardly raised the fluid to his lips ere he turned up his eyes and expired. The same day Adriansen also died. When they started, they were seventeen in number; and, with the exception of the two who succumbed, the rest, after unheard-of dangers, after suffering from hunger and cold, after seeing death a thousand times in these snows and eternal

solitudes, at length reached an inhabited country. At Kola, those who returned from Nova Zembla found Cornelis Ryp, who had left them the preceding year to go toward the North. The two crews met with a joy mingled with surprise, for each had believed in the death of the other.

This was the last expedition Holland attempted to find a passage through the ice to the Indies and China. Was the object of the voyage chimerical? Is the existence of such a passage a fiction? Serious navigators still remain persuaded that a communication exists between Europe and China by a northern route. Captain Ross twice pursued, in 1818 and 1819, the same dream which had seduced Barendz, but with no greater success. After a hundred voyages undertaken to discover this communication with the Indian seas, the question is hardly more advanced than on the first day. But the Dutch do not the less retain Barendz's memory in deserved respect, for he was one of the most skilful and most unfortunate navigators that ever existed. Commerce profited but little by the expedition he directed, but geographical science was advanced a step. Moreover, if the Dutch did not find in those mysterious and ill-omened seas what they sought, that is to say, a passage to China, they found what they did not seek—the whale.

The origin of the whale fishery is attached to

the first discoveries of Dutch navigators in the northern seas. Witnesses of the frolics of these great animals in their vast solitudes of water and ice, they saw their narratives accepted by the various maritime nations with a curiosity blended with covetousness. Holland, which cleft the way, did not at once share in the profits of the working. It appears that whaling was in the hands of the Basques during the twelfth, thirteenth, and fourteenth centuries; the Basque fishermen pursued these great animals, which were smaller, however, than the whale of the Arctic Ocean, in the Bay of Biscay, and on the coasts of southern France. This warfare was terminated by the same cause which has produced the extinction of the whale fishery in various parts—the absence of the enemy. The Dutch fishermen learned from the Basques the art of harpooning the whale and the mode of extracting the oil. The first time Dutch whalers appeared in the Greenland seas was in 1612. They were two in number: one traded from Amsterdam, the other from Saardam, and they appear to have been fitted out for the chase of walruses. These two vessels found the waters, or to speak more correctly, the ice, occupied by the English, who, jealous to establish a certain right of priority, forbade other nations, and especially the Dutch, competing with them. This rivalry between Great Britain and the Netherlands is a fact as old as

the history of the two nations. It is curious to see a great country like England resisting at that period, at each step on the globe, this small Dutch people, which dogged it, sometimes outstripped it, and valiantly sustained the contest in all those enterprises which heighten the national prosperity. The English whalers this time compelled the Dutch to return home, by threatening to seize their ships and cargoes if they ever dared to reappear in these waters. The two Dutch ships, not being strong enough to defy this threat, withdrew, but the Dutch navy was not disposed to accept the prohibition of England. The following year (1613) five or six vessels, of which four were fitted out for whaling, left Amsterdam, and other Dutch sea ports, and sailed for the fishery. The English discovered them, attacked them, and stripped them of their spoil. A vessel, manned half by Dutchmen, half by Englishmen, was captured and taken to England, with eighteen or nineteen whales. A vehement protest was made against the unjust pretensions of England, who arrogated the monopoly of these uninhabited regions.*

* The English, to prove their right to the occupation of these waters, based it on the discovery of Spitzbergen, which they attributed to one of their sailors, Sir Hugh Willoughby, who had been the first to land on those shores in 1553. This, they added, was the origin of the whale fishery. It is perfectly true that whaling is connected with the discovery of

We are sufficiently acquainted with the Dutch character to know that its basis is perseverance, especially in commercial enterprises. In 1614, the principal cities and sea ports of the United Provinces organised themselves in a powerful league, which could defy the opposition of Great Britain. The centre of this league was established at Amsterdam. A company of rich merchants solicited and obtained from the States-General the right of fishing for three years in all the seas situated between Nova Zembla and Davis Straits, and this concession excluded from the same waters all other Dutch vessels not belonging to the company. Encouraged by State protection, this society enlisted Biscayan harpooners, and in order to ensure the security of its vessels it supported them by four men-of-war, each mounting thirty guns. This formed a fleet of eighteen sails, and before such a display of strength, the English, who had at that period in those seas only thirteen great ships and two pinnaces, left the Dutch at liberty to carry on their whaling in tranquillity. It might be imagined that Great Britain had abandoned her pretensions, but

Spitzbergen ; but it is now averred that the discovery claimed by the English really belonged to the Dutch ; and hence the pretensions of Great Britain were based on error and injustice. Still the conduct of the English in this affair must not be judged too severely, for the principles of international law were then so little fixed, that the first occupants everywhere claimed, without ceremony, the monopoly of seas newly opened up.

it was not so. After two or three years, during which the Dutch maintained themselves in these seas by the superiority of numbers, the jealousy of the English broke out afresh: the Zeeland sailors were once again stripped of the fruit of their fishing, and saw their ammunition seized by the Vice-Admiral of the British fleet. This new outrage only strengthened the resolution of the United Provinces. Resolved to conquer on this point the opposition of England, and to continue a trade whose natural advantages they foresaw, the Dutchmen redoubled their efforts. Exasperated by this confiscation of their oil, guns, and ships, the Zeeland fishermen returned in 1617 to these seas with thirty-three well armed ships. They took up a position in the most frequented bays, and thwarted the English fishery. Towards the end of July, a small Zeeland squadron attacked the British vessels, killed a part of the crews, burned their barrels, and seized one of the vessels to indemnify themselves for the losses sustained in the last expeditions. This vessel captured from the English was conveyed in triumph to Holland by the fleet of Dutch fishermen, but the States-General, not feeling at all inclined toward this system of reprisals, set the vessel at liberty and compensated the captain. The lesson, however, had gone home: as the right of the English was, after all, only that of the stronger, it was destroyed

by force, and the two countries came to an understanding to divide the fishing ground. Each nation was to pursue the whales along certain coasts, and within limits assigned it. Holland soon surpassed Great Britain herself in her maritime enterprises to discover the much-coveted booty. The history of this grand fishery is divided into two distinct periods—that of protection, and that of liberty.

The company founded at Amsterdam in 1614, retained its privileges till 1642; but this monopoly incessantly aroused the dissatisfaction of certain Batavian provinces which found themselves excluded by such a treaty from the profits of a sovereign industry, and appeals were sent to the States-General. The valorous and enterprising character of the Frisons especially, endured with impatience the legal obstacles which forbade them access to these terrible regions. They invoked the common right which all parts of a republican State have to participate in the same dangers and the same advantages. The States-General of Friesland laid down the principle of the natural and unbounded liberty of the seas, and a company formed in that province obtained a concession to catch whales. Zecland had also obtained the same privilege; and the three companies of Amsterdam, Friesland, and Zeeland combined their interests to stop the claims of other cities

which wished to dispute with them the Arctic Seas. These hopes were foiled, however; for all the adventurers of the United Provinces continued to protest against a State concession which excluded them from the stage of so profitable a trade. Under a protectionist regime, however, the whale fishery attained a flourishing position: but the success must be attributed, partially at least, to the very nature of things. At the outset, the whale allowed itself to be captured with a certain amount of simplicity. This giant of the animal creation reposed entirely and proudly in the confidence of its strength, and it was the first time it saw man amidst that ice which was probably contemporaneous with the glacial era of the globe. An enemy of such slight stature did not alarm it much, and it disdained to fly from the bays and coasts which had been the witness of its uncontested dominion.

At that period the great cetaceans flocked round the Dutch vessels in enormous shoals, and the sailors easily destroyed a considerable number. It frequently happened that the company was obliged to send up cleared ships to convey to Holland the produce of this superabundant fishery. Such success inspired the company with an unfortunate confidence. Believing that the fishery would continue in this prosperous condition, it founded on the desert isles of the Polar Seas vast and magni-

ficent establishments, which led it into exaggerated expenses. A Dutch village rose amid the Arctic solitudes, and took the name of Smeerenberg. Annually visited by fifteen or eighteen thousand Netherland sailors, the colony assumed an unexpected development. The village of Smeerenberg and the whole island of Amsterdam presented at that period the appearance of a manufacturing and commercial town. A considerable number of colonists proceeded every year to the spot to sell to the sailors certain stores, such as spirits, wine, and tobacco. The inconveniences of a voyage in these distant and icy regions were amply compensated by the profits derived from the trade. Artisans of all descriptions were not long in following them. One of the delicacies in great demand with the worthy Hollanders of that period, especially in large cities, was small hot rolls for breakfast. This table luxury was transported from Amsterdam to Smeerenberg, and the bakers announced to the sailors and colonists, by blowing a horn, the moment when they drew the batch from the oven. Round the factories and other buildings of the company there rose private houses, which were abandoned during the winter, and re-occupied in the following summer. The Netherlands had their colonies at the extreme south, and the extreme north. Smeerenberg was the Arctic Batavia. The results obtained in the following years, how-

ever, did not justify the excessive expectations of the Greenland company. The enormous expenses incurred by ship-building, outfitting, and purchasing fishing material, entailed terrible miscalculations. On the other hand, the whales began to be on their guard, and retired from the bays in which such an obstinate chase was maintained against them. A system of prodigality was then followed by one of economy; but it was too late, the prestige had faded away, and the hour of declension had struck for the company. Utrecht, Gelderland, and Over-Yessel did not cease to address representations to the States-General, and demand free trade in fishing; and the States, comprehending that the maintenance of privileges was no longer possible, and would even injure the interests of the trade of the Netherlands, at length laid the seas open to all adventurers.

We now enter on a second phase of this celebrated fishery—the era of free trade. The States had only cause to applaud their decision, for in a short period this important branch of the national commerce was developed in an unexpected manner. The number of vessels annually sent off to the whale fishery by the Greenland company was about thirty; after the abolition of the privilege it rose to two hundred and sixty, manned by fourteen hundred men. Under this new *régime*, this splendid industry attained a degree of deve-

lopment which has eternally associated the name of Holland with the whale fishery. The Netherland sailors then acquired an experience and intrepidity which caused the Biscayans to be forgotten. The profits of the fishery were for a moment fabulous, especially off St. Maurice island. It is recorded that a vessel, commanded by a certain William Ys, made two voyages in one year, and each time brought back to Holland one hundred barrels of oil. The whale fishery, however, did not long remain at this extraordinary degree of prosperity. More and more terrified, and seeing that their empire was decidedly destroyed in these seas, where, before man's arrival, they had met no serious enemies, the whales intrenched themselves behind the ice, as a rampart given them by nature. Here they had ere long to be followed through dangers and at considerable expense. In 1719, the whales passed from the seas near Spitzbergen to Davis's Straits, and at this new spot the material profits, though still considerable, were frequently balanced by enormous losses. There were years in which it was necessary to abandon as many as twenty ships in the ice; but, despite these disasters and unfavourable chances, the Netherlands derived from this fishery considerable profit. The Polar regions were to the Low Countries at the end of the 16th and during the first half of the 17th centuries, a California lost in

snow. The whale oil flowed in waves of gold—to employ the expression of a Dutch poet—over the destinies of the Republic. This historic fishery, however, was approaching a period of dread even with the Republic itself. It maintained its ground, though greatly reduced, till 1795, a period when political troubles, and eventually the wars of the Empire, by closing the seas, entirely destroyed it. In 1815, when the peace of Europe was re-established, the government of the Netherlands offered a premium in order to restore the whale fishery. Each vessel fitted out for it was to receive 4000 florins at its departure during these voyages, and 5000 more if it returned empty. This system of protection was powerless, and only partially aroused the ardour of the Dutch whalers.

The history of the whale fishery would be incomplete if we omitted to describe the efforts attempted on several occasions by the Dutch to establish themselves in these rough and silent regions, to which nature appears to have refused the conditions of human life. From the outset, the Netherland whalers understood the advantages they would derive from a fixed and permanent occupation of these latitudes, annually visited by their vessels at a great expense. The adventurers who took up whale fishing, finding a greater advantage in establishing colonies in these inhospitable countries, neglected no means to induce attempts of

this nature ; but so great was the terror with which this enterprise inspired even the most courageous men, that the most seductive offers were not listened to. A Russian company, after obtaining a respite for some men condemned to death, promised them not only pardon, but a reward in money, on the condition that they would spend one winter in Spitzbergen. The fear of the punishment suspended over them drew a consent from them ; but when they were transported to the scene of the experiment, and saw these cold, frightful, desolate regions, they recoiled with horror from their new abode, and asked to be conveyed home to suffer their penalty sooner than brave in such regions an incessantly revived death. An English captain, who had undertaken to carry them to Spitzbergen, took compassion on their despair ; he brought them to England, and on his return interceded with the company for them, and obtained their pardon.

The prospect appeared abandoned, when suddenly an accident, a fearful accident, achieved what the Dutch merchants had been unable to obtain from their fellow citizens for gold, and the Russians for the gift of life. The master of an English vessel lost sixteen of his crew ; eight, separated by accident from his ship, were left at Spitzbergen, the other eight were chasing reindeer at another point of the same group of islands to provision the

crew, when the ship, driven by the sea, was compelled to abandon them to their wretched fate. The first eight perished during the course of the winter, and their corpses, hideously gnawed by predacious animals, were found in the following summer. The other eight, on returning to the spot where they had left the boat, perceived to their horror that their ship was gone. By the aid of the resources the chase supplied them with, with the relics of the whale blubber left in the boilers, and the buildings put up by the colonists in summer, and in which they took shelter, these wretches contrived to keep alive till the arrival of the squadron that visited these parts in the spring. The fate of these eight men, who had fortunately escaped a death that might be considered certain, aroused once again in the tenacious Dutchmen the desire of establishing permanent colonies in these gloomy solitudes. Fresh rewards having been proclaimed throughout the fleet, seven more volunteers offered their services, and they were landed on St. Maurice to spend the winter there. Some other volunteers were taken simultaneously to Amsterdam island, to north-east of Spitzbergen, and after leaving them provisions and clothing they were abandoned. When the fishing squadron returned in the following year to the Greenland seas, the Zeelanders first arrived in sight of St. Maurice. The hearts of these worthy

sailors beat with impatience and anxiety, for they were eager to know the fate of their brave comrades. Some of them approached the coast in a boat, but, alas! it was silent and desolate. It was then a race which should get first to the huts of the poor fellows; seeing then no one on the beach or near the houses, they began to conceive frightful apprehensions. They had scarce entered the huts ere they found the dead bodies of the seven men left on the island in the previous year. Each of them was in his own cabin; by the side of some of them bread and cheese could be seen, on which they had supported life shortly before their death; near another lay a prayer-book, open at the page he had last been reading. The sailors stood, confounded with admiration and horror at the thought of the misfortunes which these unhappy men had suffered in their frightful exile. The commander of the vessel, on hearing the fatal news, himself landed; he gave orders for the bodies of the seven victims to be placed in coffins and interred provisionally under the snow, until the ground became less hard. They were laid side by side, and stones were placed on the tombs to prevent the wild beasts unearthing the bodies. As far as circumstances and the place permitted, funeral honours were paid them, and a discharge of artillery saluted for the last time these courageous martyrs to Arctic knowledge. In the hut memoirs were

found, or to speak more correctly, a meteorological journal, with cursory and touching notes about their personal situation. It required all the devotion and passive courage of the Dutch, imbued with their positive spirit of observation, to write these simple pages, which cannot be read without contraction of the heart. There is especially in this artless journal, written by the rude hands of these seamen, one detail which incessantly returns, and produces an undefinable feeling. On the beach of this desert island is a mountain, to which these wretches proceed on the days when snow, wind, and cold permit it. From this mountain they look out far, very far, as if to see whether anything be coming to their help, "but," they add, with a species of disappointed hope and discouragement, "we saw nothing—nothing but sea, in whatever direction we might turn our eyes."

The whaling squadron then started in search of the other seven sailors left at Spitzbergen, that is to say, nine degrees farther north. In spite of fearful sufferings, all of them had survived. This partial success encouraged the hopes of the merchants and outfitters; they made a fresh appeal to volunteers from the fleet, and the same year seven other men took the place at Spitzbergen of those who had managed to cling to life. These unfortunates also kept a journal, which described the state of the weather, and that of their declining

strength. We know not in truth which we ought to admire most, the resignation of these men or the audacity of the companies which sought before all in their deadly experiments the means of increasing the fortunes of the fishery. When the ships arrived from Holland the following year, the sailors found the door of the hut closed, and on entering the interior, which was dark, they stumbled over corpses. Three were in coffins, the others laid on the ground upon sails, with their knees drawn up to the chin. The door of the hut was carefully closed again, lest the bodies might be devoured by the Polar bears. This was the last attempt made by the Dutch to establish winter quarters in Spitzbergen.

The history of the whale fishery ought also to embrace that of the celebrated shipwrecks to which these perilous voyages in the eternal ice have more than once given rise. It would be a long and lamentable maritime story, from which we will detach but one episode. A whaler left the Texel in a galliot; and on arriving off Spitzbergen, where he designed to anchor, he was prevented by the ice banks through which he tried in vain to steer. Perceiving two whales in the bay, he set out in pursuit of them. While the crew were busy rowing and following the movements of these animals, they discovered some distance off a large ice-island, and on its surface a white object, which

they took at first sight for a bear, but the harpooner thought it was something else, and persuaded them to row in that direction. Having followed his advice, they soon perceived beneath this cloudy sky, and in the midst of this scene, where all is white, undecided, and foggy, a fragment of a sail, which some one was doubtless raising in the air as a signal of distress.

They rowed at full speed toward this spot, and on approaching it, to their great surprise, found four living men and a corpse on the island. These wretched beings, who were Englishmen, fell on their knees, expressing their joy and gratitude at so unexpected a deliverance. When their vessel was wrecked they were forty-two in number, and hardly succeeded in saving some provisions and tools. The captain, after two or three days' reflection, perceiving that it was impossible for them to live long on this ice-field, determined to reach the land in a boat with seven of his men. If he succeeded in his undertaking, he would send to those he left behind. He set out, but the wind blew furiously, and as they never heard of him again, the unhappy men assumed that his boat had sunk in reaching land. Thirty-four remained behind; they soon wanted provisions, and having nothing to expect but death, the poor fellows divided once again. The majority of them embarked on drift ice, in the hope of reaching some coast;

and those who remained behind never heard of them again. From forty-two the shipwrecked men were reduced to four, who attached themselves to this inhospitable soil as a plank of salvation. They had dug a large hole, like a cavern, in the thickness of the ice, and closed the entrance with the blocks they extracted, in order to defend themselves against the violence of the wind and waves. They had lived in this hole a fortnight since the loss of their vessel. Crushed by despair, tortured by cold and hunger, they saw from moment to moment a certain death approach. For some days they had only eaten a leathern belt belonging to one of the shipwrecked men, which they had divided among them strip by strip, till it was all devoured. At the moment when the boat arrived in sight of their ice-island, they were utterly without resources. Taken on board the Dutch galliot, they received the most generous attentions, but three of them died a few days later of their privations and sufferings. Of the whole crew of the shipwrecked vessel, only one man survived, and eventually reached Delft, whence he returned to England.

In what state is the fishery at the present day, so fertile in advantages, so important from a social point of view? This is a question to which the very succession of my studies of Dutch life led me. Being in 1855 on the banks of the Zuyderzee, formerly the chief theatre of the outfitters for the whale

fishery, I sought traces of a maritime industry, which had raised so high and borne so far the name of Holland. Alas! these traces are now thoroughly effaced: The island of Marken, which once supplied the Greenland fleet with intrepid whalers, no longer knows the road to the ice. I proceeded to the coast of Friesland, whence so many successful adventurers set out in the two last centuries. There again the fishery is but a memory. I wandered thus round the gulf, seeking the remains of a commerce which long caused the population of the seaboard to flourish, and at length halted at Stavoren, the oldest of the Frison towns. It was a considerable city at the period when Amsterdam did not exist, or, at the most, was but a fishing village. Then kings of Friesland held their court there, and Stavoren was one of the most powerful Hanseatic cities. In the 9th century its inhabitants discovered the Arctic land, and opened a passage through the Sound to the waters of the Baltic, where they carried on an immense trade. The Danes, in reward for a discovery which gave them great advantages, granted the Stavoren ships a free passage through the straits, and in return for this favour they had only to give a piece of Leyden cloth to the King of Denmark. Powerful on the seas, enjoying a convenient port to which all the merchandise of the East and West was brought, seated on a slight eminence, which juts

out into the gulf like a promontory, Stavoren defied all the other cities of the Low Countries.

At the present day what a change! This opulent Nineveh of the Zuyderzee, as it was called, is only a miserable village. A legend tells us the causes of a decadence and desolation which rival the fate of the old Holland cities. The inhabitants of Stavoren, this legend states, not knowing how to endure a daily increasing prosperity, fell into luxury and insolence. In their pride they went so far as to cover their balustrades, their drinking vessels, and the doors of their mansions with gold. Such an extravagance humiliated the cities of Holland, which avenged themselves by calling the others "the spoiled children of Stavoren." The haughty townsmen had attained this degree of splendour, when fortune turned against them suddenly, like the leaf of a book blown by the wind. A rich merchant's widow, having freighted a vessel which she sent to Dantzig, ordered the captain to bring back precious merchandise. The captain, on reaching Dantzig, could only procure wheat; so he loaded his vessel with it and returned. The lady of Stavoren asked him what he had purchased at Dantzig, and the captain replied, wheat. Thereupon the haughty widow ordered him to throw into the sea over the starboard side what he had taken by the larboard. The captain obeyed, and God manifested His wrath: so soon as the wheat was scat-

tered over the sea, a sand-bank of immense extent rose at the spot, which is still visible, and on which ships are cast away. The sand-bank destroyed the commerce of this opulent city, which gradually decayed. At the present day its navigation and great fisheries have fallen with all the rest, and I only noticed a few poor boats that still carry on the herring fishery in the waters of the Zuyderzee.

I next proceeded to Harlingen, where I was told that the whale fishery had been kept up during later years. I walked about the port, a masterpiece of Dutch industry. I admired the tall and wide sea dykes which defy the whole weight of the ocean, which breaks against the base of the statue of Gaspard Robles, when I saw a vessel enter the port just returned from the Arctic Seas. It was the last that went whaling, and the voyage had not been successful, for it only brought back a small lading of oil, and a few seal-skins. The humiliated sails sufficiently announced the ill success of the crew. Still there was a mob of curious persons on the quay silently gazing on it, among whom I noticed an old man with a weather-beaten face, like that of sailors. He was watching in sorrow the return of this ship, and muttering between his teeth, "Oh! what a falling off!" This old man had been mate of a whaler; he had therefore witnessed the glorious days of this national fishery. He had taken part in the courageous enterprises

of the Frisons who, after 1815, tried once again to hoist the Dutch flag in the Arctic seas. I addressed him: he spoke several northern languages, as do all Dutch sailors who have stood on friendly terms with the various maritime people, but especially a rough English, which well reflected the character of his features. Delighted at finding some one who still took an interest in whaling, he readily gave me all the information I required about the preparations for the voyage, the sea life, the manners, adventures, and exploits of his comrades, as well as the art of harpooning. I have tried to reproduce the old sailor's narrative, while retaining as well as I could the enthusiasm and energy of these personal reminiscences, the colours of a mind profoundly affected by the impressions of a hazardous existence.

## CHAPTER XIV.

AN OLD WHALER—CROSSING THE ARCTIC LINE—THE ICE FIELDS—SPITZBERGEN—THE WHALES AND THEIR MOVEMENTS—THE CROW'S NEST—THE CHASE—CURIOUS INCIDENTS—AFFECTION OF WHALES—A FORTUNATE ESCAPE—STORMS AND THEIR CONSEQUENCES—FLENCING—WHALE STEAKS—HAARLEM KITCHENS—THE WALRUS—SEALS AND THEIR HABITS—POLAR BEARS—WHITE FOXES—LIFE ON BOARD A WHALER—AURORA BOREALIS—THE SOUTHERN FISHERIES—MARINE ELEPHANTS—ENGLISH WHALERS.

THIS is what the old whaler said to me:

"You may be perhaps surprised at the bitterness of my regrets, but any one who has a drop of Frison blood in his veins cannot witness, without a sigh, the state of humiliation to which a fishery has fallen that was the crown and glory of the United Provinces. Our colours had even made the British flag itself turn pale in the Arctic seas. It is to the whale fishery that the Republic owed a portion of its great navigators and intrepid sailors. If this fishery was the result of voyages undertaken by our ancestors in the Arctic Ocean, it has in its turn favoured the study of the Hyperborean

regions, and driven back the bulwark of ice. The Dutch whalers were prohibited, under heavy penalties, from entering on board the ships of hostile nations, or exporting fishing materials. In the time of war, our sailors were bound to serve aboard the State fleet, and you can easily judge what might be expected from these men, accustomed to brave the monsters of ocean and the climate of the Polar regions. A few years ago, Harlingen, my native town, still struggled on; but the number of its whaling vessels was reduced to four, then to three—at the present day, as you see, only one vessel returns to our port, and that is nearly empty. Alas! I tell you the whale fishery is expiring.

"We left one of the ports of the Netherlands at the end of March or beginning of April, though some whalers started even earlier. Impatient to force the barrier of ice, which in the cold season closes Spitzbergen, they entered the solid seas betimes, in order to reach the retreat of the whales. They profited by a favourable breeze, and, by the help of ropes and saws, advanced through incredible dangers and fatigues, amid the disjointed rocks. The accidents and losses to which so laborious a navigation gave rise caused the system to be abandoned; and it is both more economical and advantageous to wait till the sun has unfastened the girdle of ice, before risking

one's self in these dangerous seas. The vessels intended for whaling were good sailors, strongly built, and nearly covered with iron plates: you can judge from the one you have before you. These precautions were necessary in order to get through the Greenland seas, and Davis' Straits, where we were incessantly exposed to the pressure of the ice, snow storms, and the fury of the waves. The crew was composed of forty or fifty men, among whom there were different ranks and professions; each kept to his duties, and they slept in cabins made under the main deck.

"We were greatly amused by the consternation of the apprentices when they entered these dark and icy seas, which resembled nothing they had hitherto witnessed. I regret, and shall ever regret, an old custom which is now abolished. The neophyte engaged in his first voyage was initiated into the mysteries of the Arctic Circle by a solemn ceremony, which our old sailors still remember. Ocean, clothed in his proper appointments and attributes, himself came on board to receive the homage due to him as master and sovereign of these kingdoms. Sea-weed, marine moss, oysters, madrepores, star-fish, and shells of every description, adorned the person of his Hyperborean Majesty, and being perfumed with the essence of whale, walrus, and seal, he exhaled the odour so agreeable to the epicurean Green-

landers. Seated on his car (a lump of ice), and followed by his natural train of cetaceæ, sea-serpents, in a word, all the monsters of his court, he was really imposing to behold—he was a king, every inch a king, I assure you. The trembling adept was then led into the presence of Ocean, who made him undergo an examination. This trial ended, he was delivered over to his Majesty's officers, who performed their duties strictly and conscientiously. This second trial was really terrible: trembling with fear and cold, the wretched novice was shaved with a razor made by the cooper, soaped with dregs of whale oil, and then plunged into icy water. He was drawn out of it half-dead, but regenerate; and after such a baptism, had a right to regard himself as a child of these seas. If you now mention this custom to sailors who cross the Arctic Circle, they only remember it as a legend. Old sailors, however, do not recall without emotion the scenes of their youth; for this day of trial was at the same time a holiday and merry-making for the crew.

"When the ship reached 60° or 65° of latitude, we began to make all the preparations for whaling. The captain gave each man a different duty and the instruments he required. The preparations for the attack principally consisted in fitting out the boats. Each boat is supplied with two harpoons, six or eight lances, and five or seven oars.

The crew are then divided into so many divisions as there are boats; and each of these has its staff, consisting of a harpooner, a pilot to steer, a man who looks after the ropes, and three or four rowers. When all is ready, the first ice is broken in the latitude of 75° or 76°, and the vessel advances through these difficult seas till it reaches between 77° and 79°, the fields of solid ice under which the whales ordinarily keep.

"It is necessary to form an idea of the nature and topography of these little known seas, if you wish to comprehend the dangers of arctic navigation. One of the marvels of the abyss of waters that stretches out beneath the night of the poles is indubitably the ice-plains. This name was given them by a Dutch whaler, and has passed into all languages. One of the ships collected at Smeerenberg for the fishery sailed away to the north-west for a considerable distance; it saw no whales, but passed really prodigious icebergs which resembled plains through the extent of their surface. Sometimes these plains are set in motion, and you can easily imagine the consequences of such masses meeting others that offer a resistance; it is one of the most solemn sights the Polar seas afford, and assuredly one of the most terrifying. It is not rare for these blocks to acquire in floating a rotatory motion, which often goes on at a speed of several miles an hour. A

field of ice that thus advances, revolving on its axis, and dashes against another at rest, or a plain animated by a contrary motion, produces a frightful shock. The weaker of the two is knocked to pieces with an indescribable noise, and sometimes the destruction is mutual. The two fields of ice meet and fly into pieces and dust; the fragments, of enormous dimensions and of considerable weight, are frequently hurled twenty or thirty feet into the air, and cover an immense space, while others suddenly sink to the bottom of the sea.

"You can imagine that the most powerful and best built ship is but an insignificant obstacle to these floating masses. If it has the misfortune to be caught between two plains of ice in motion, it is inevitably crushed. The danger is heightened in foggy weather, for it is then difficult to follow distinctly the progress of these great bodies, which are blended with the general colour of the sky. It would take too long to tell you all the accidents that have occurred through these ice-fields when agitated by the wind, or by ocean currents. Our ancestors had in a single year fourteen of their vessels shipwrecked on such reefs, while eleven other ships were blockaded for the winter. In 1777, a Dutch vessel, the *Wilhelmina*, was caught in the ice, about June 22, and the pressure exerted by the huge floating masses was so great, that the

crew were obliged to open a passage by sawing through this solid sea. A few days later, the ice thawed, and the ship was towed by the boats in an easterly direction. After working hard for four days, they perceived at the end of the bank four other ships still surrounded. Assailed by a tempest, and a chain of moving hills that rose to a height of twenty or thirty feet, this group of ships was frightfully ill treated and three perished. The *Wilhelmina* herself was dashed to pieces by the fall of an immense mass that broke off; and the event was so sudden, that the men in their berths had scarce time to save themselves in a half naked state on the ice. Only one ship was now left, aboard which the crews of the last ships went to seek shelter. About the beginning of October, this last vessel was carried a long distance by the ice-plain at which it was moored, struck against another mass and sunk. Three to four hundred men were thus cast on the solid sea, almost without food or clothing, and without even a tent to protect them from the rigour of the Polar frost. At the end of October, the unhappy shipwrecked men separated; the greater number reached land, and undertook a desperate journey along the coast of desolate islands. The rest remained on the ice field, waiting till the waves should carry it within sight of Staten Hoek. Without shelter, or fitting clothes to protect them against the cold, reduced to the

sad necessity of passing from one mass of ice to another during the obscurity of the night, they courageously braved death. After receiving a kindly reception from the good Greenlanders, 140 of them reached the Dutch settlements on the west coast of Greenland; the rest, that is to say, about 200, perished. We told each other these adventures in the cabins of our ships, seated round the stove, and such narratives of past days, far from reducing our courage in the presence of the same dangers, only reanimated our national ardour. These seas, filled with the names and exploits of the Dutch, imposed on us the obligation of not disgracing our ancestors.

"The changes the ice-fields undergo are at times so extraordinary and capricious, that they foil all the calculations of navigators. I saw two ships, solidly fixed in these motionless masses, suddenly carried away by the same masses set in motion. They were then separated from each other by a distance of several leagues, in spite of the apparent continuity of the bonds that retained them on the surface of the icy ocean. We must, moreover, make a distinction between the ice-fields which cover the sea near Spitzbergen, and the moving mountains which sail from the depths in Davis' Straits. There is a perfect ice geography, no trace of which is found on any chart drawn by man's hand. All the fishermen who have forced

the ramparts, behind which the whale is now sheltered, know that there are towards the Arctic pole isthmuses and archipelagos, and then a perfect ice continent, whose extent has not yet been measured. This continent is principally formed of a successive chain of mountains on the coast of Baffin's Bay. These mountains rise from the bed of ocean two or three hundred leagues from any known land. The eternal snow, the fogs and rain, according to all probability, annually increase the height of these peaks. But the laws of this growth have not been studied by our geologists. Who will say what elevation five or six centuries add to the elevation of these Alps of the Polar seas? Here all is mysterious and gigantic. Our old Dutch poets, whose works we read at times to while away the weariness of our long voyages, are fond of alluding to the stern beauties of winter; but, in truth, their knowledge of it is very superficial. You must have visited the northern seas to form an idea of snow, fog, and what you call frost. There, at any rate, winter rejoices; eternal, splendid, and haughtily, seated on mountains of ice, old as the foundations of the earth. It is true that the only spectators are Polar bears, clumsy whales, and, by chance, a few poor fishermen, who admire in silence these grand scenes of nature, but know not how to describe them.

"One of the essential points is to discover the

habitat of the whales, and for this experience and a quick eye are required. Although the cetaceans seem to prefer the vicinity of ice-fields, some, however, inhabit the open sea. The greater number of them assemble in a very restricted circle; while others again spread over an immense surface. There are whales that live alone or in couples; there are others which wander over the ocean solitudes in schools. These nomadic tribes are distinguished from each other by peculiarities of age, character and manners. The life of these great animals is but little known, in spite of the observations of the whalers who have been lurking there for centuries. It is curious to watch their movements; at times numerous groups disappear for several days from the fishing ground. These mysterious evolutions are doubtless determined by the laws of alimentation, by the instinct of self-preservation, and other causes it is impossible to penetrate. The practical success of the whaler consists less in studying the secrets of nature, than in understanding the weather and localities. It is, however, difficult not to be interested in the fate of these gigantic creatures, whose security could be so great if man had not forced their inaccessible retreat.

"Cloudy weather is generally chosen for chasing the whale; when the sky is clear, the sea is, so to speak, lit up, and the shadow of the boats is so

powerfully impressed on the surface of the water by the sun-beams, that the whales are easily startled, and escape the hand of the most skilful fisherman. A cloudy atmosphere, without fog and snow, offers the best chances of success. The chief of the expedition stands in an elevated part of the ship called the crow's nest, where he surveys a considerable extent of water. With a telescope in his hand, he awaits the moment for the prey to show itself; if he discover a spout and the steam the whale generally sends heavenward in breathing, he at once shouts: *val, val!* It is difficult for any one who has not witnessed the fishery to form an idea of the excitement such a cry produces among the crew. The sailors, who were in bed, spring up at once, and with a temperature frequently below zero, rush on deck with their clothes in their hand. They then get into the boats in parties of six or seven, the harpooner who has to attack the whale standing in the bows. You are really struck with admiration at the sight of this man, who is ready with so feeble a weapon to attack the most prodigious animal of nature. The boat is pulled toward the whale, and the harpoon is thrown so that it may enter under one of the monster's fins. The whale, when struck, flies with the rapidity of the wind and the sound of a cannon ball, and then plunges under water. Most frequently it swims toward one of the icebanks,

which may afford it a shelter; but a cord is attached to the harpoon that sticks in its side. In the boat there is a man whose duty consists in letting out and guiding this line, so as to follow the animal, as it were, with the hand to the depths. Another man steers the boat; he watches the movements of the whale, which he estimates by the oscillation of the boat, and encourages the crew with his voice. During all this period, the oars hang deserted on either side the boat; the breathless sailors watch with visible anxiety the eyes of the man who slacks the line, and who by the aid of an instrument gauges the descent of the whale. Sometimes the stock of line is insufficient, and the boat indicates its wants by raising an oar in the air, when the other boats at once hurry to its help. The time a wounded whale passes under water is generally thirty minutes; but some will remain much longer. At length the animal reappears, and the other boats pursue it with incredible ardour. The whale is harpooned three, four, or five times; constantly plunging and reappearing to draw breath, it begins to lose its strength with its life. The lances enter its huge body on all sides; the sea for a great distance is bloodstained, the ice, the boats, the oars are red with it. Although exhausted by its numerous wounds, the whale struggles for a long time yet in the convulsions of a terrible death-throe. It

lashes and shakes its tail desperately, and the noise of this formidable tail beating the air is heard for a distance of two or three miles. The circles formed on the surface of the violently agitated water extend for an enormous distance. At length the end comes, and the whale turns on its back or side. This death is saluted by flags, which at once float in all the boats, and the frenzied hurrahs of the sailors."

It frequently happens that whales will escape after being harpooned twice or even thrice, or a tempest or other accident may compel the cutting of the line. These same whales often fall two or three days after into the hands of more fortunate fishermen, though some are never found again, or at a very considerable distance from the scene of the attack. A Dutch captain, from the small town of Saardam, Jacob Cool, learned one day that a whale had been captured by Indian fishermen in the Gulf of Tartary, and on the animal's back a harpoon had been found marked with the letters W. B. It was found that this harpoon had belonged to a Dutch whaler of the name of Willem Bastiaanz, and that the cetacean in question was harpooned by him in the Spitzbergen waters. Such wounds frequently date back to a very remote period. I saw, myself, a lance-head of grey stone, which was taken out of the blubber of a whale killed by the English, and the hole was still visible

into which the handle of the lance was fixed. The weapon had entered the blubber deep, and the wound had long been healed, a slight white scar alone indicating the spot where the lance-head had penetrated. In 1812, the crew of another vessel, the *Aurora*, captured, in the same seas, a whale which had a bone harpoon in its back. Though these facts are frequent, they are not the less extraordinary, for such weapons are no longer employed by any known nations. The Esquimaux of Hudson's Bay and Davis' Straits, since their relations with Europeans, employ iron implements in the whale fishery. These stone lances and bone harpoons, therefore, belonged to the ancient Esquimaux, or other unknown tribes that had no connection with civilisation. In both cases, the whale, that living museum, which sometimes carries a history incrusted in its flesh, deserves to fix the attention of naturalists and navigators. In fact, such a circumstance can only be explained by the longevity of these prodigious animals, or the existence of human races living on unexplored coasts.

"The whale was an enemy to us" (the old sailor continued his narrative), "but it was an enemy we esteemed on account of its strength, and more especially its affection for its young, which forms a striking contrast with the general character for stupidity of these animals. The young whale

swims under the protection of its mother; ignorant of danger, it can be easily harpooned, but such is the devotion of the whale in such a case, that it willingly exposes itself to the attacks of the fishermen to save it. Alas! we took advantage of this devotion. The young whale is of slight value, hardly producing a barrel of oil; but we struck the child to have the mother. It was wrong, no doubt, but what would you have? in war all weapons are permissible, and we were waging war. I remember that in 1828 we harpooned a poor young fish in the hope of catching a splendid whale that escorted it. All at once it darted at the boat, and seizing its cub, sank with it to an enormous depth with prodigious rapidity. It reappeared on the surface with the young one, which it encouraged to escape, and protected it by holding it under its fin. From time to time it stopped, changed its direction, and displayed in all its movements signs of extreme restlessness. Its formidable tail lashed backwards and forwards like an immense javelin, and it was dangerous to approach, but for all that, the boats chased it. Inspired by maternal affection, and reckless of danger, it menaced the enemy with heroic courage and resolution. At length one of the boats approached it, a harpoon was cast, and held. Though struck, it seemed to forget itself only to think of the fate of its cub, close to which it constantly kept. A second har-

poon was cast, and then a third, but the whale made no attempt to escape. The other boats surrounded it, and within an hour it was killed. The fate of this mother, which died to some extent voluntarily to save its young, was certainly of a nature to affect us, but the issue of the combat, the value of the prey, and the joy of triumph, soon aroused other emotions in us.

"The whalers have an argument to reassure their consciences, which are shaken by the pathetic and interesting scenes that accompany the destruction of the giant of nature. Man, they say, has his weapons and intellect; the whale has its strength, means of flight, and an open ocean before it, and it is consequently a fair fight. I must add, that this daring fishery amid the ice is not exempt from danger, and the memory of every whaler would supply him with a multitude of adventures on this point, from which I shall select only a few. One of our harpooners had been so bold as to get too near a monstrous whale, which saluted him with such a violent blow of its tail, that the poor devil was some time ere he could regain his breath. The men of another boat in order to display their bravery, too, harassed the animal in their turn, which upset their boat. All saved themselves with difficulty by swimming and hiding their heads under water. The cold was intense, and they were picked up all trembling; their hair was

frozen, and they had a cap of ice on their heads. The greatest danger in such a case is sleep, which is the twin-brother of death. We were obliged to watch them, and keep them awake in spite of themselves. At a later date we allowed them to sleep for an hour, but at the expiration of that time we aroused them, not without great difficulty, from their lethargy. Without these precautions, men, who had been long exposed to cold, would not wake again.

"The strength of the whale is in its tail, and it is with that it defends itself; but of all the accidents caused by this formidable animal, there is none more extraordinary than what once happened to a Dutch harpooner. A wounded whale had disappeared by diving; James Vienkes (that was the name of this old adventurer) was preparing to deal it a second stab, when the animal, on returning to the surface, struck its head against the boat in which the enemy was, and dashed it to atoms. Vienkes was hurled into the air with the fragments of the boat, and fell on the monster's back. The intrepid sailor, who had not let go his harpoon, buried the weapon in the body of the whale on which he was seated, and by means of this harpoon and the line he still held in his hand, he secured himself on the slippery back of his formidable steed. In spite of his critical situation, in spite of a wound he had received in his leg in his fall, he

did not lose his senses, but called the other fishermen to his help. The boats tried several times to approach the whale, but their efforts were in vain. The Captain, Cornelius Gerard Ouwekaas, seeing no other way of saving the brave fellow, bade him cut the rope that embarrassed him. Vienkes could not follow the advice; for his knife was in his trowsers pocket, and he had enough to do with his hands as it was. In the meanwhile the whale advanced along the surface of the water at a great rate, but fortunately it did not dive. The sailors were beginning to despair of their comrade's life, when the harpoon by which Vienkes was supporting himself came out of the whale's body. The resolute man profited by the circumstance to cast himself into the sea, and struggling against the waves, regained the boats which had been unable to succour him. He was picked up at the moment when his strength was exhausted. The sight of the danger one of their friends had incurred, had animated the sailors against the whale; they set out furiously in pursuit of the animal, and killed it.

"Accidents of another nature also accompany this fishery. At the moment when the boats are dispersed over the sea, and eagerly pursuing some fugitive whale, it is not rare for a storm to spring up, and in such cases the sailors have a difficulty in regaining their ship. In this way boats' crews

have been more than once lost in the ice. On May 30, 1830, we were sharply pressing a whale which, in spite of the harpoons and several lances with which we wounded it, was escaping us. The rapidity of the chase and the fury of the action had dispersed our boats—when a tempest burst forth, such a tempest as is only met with in the Arctic Seas. The ship was out of hail, and we wandered about in a night of snow. After two days we were so fortunate as to rejoin the ship, and the crew displayed their joy and their anxiety at the same time—three boats were still missing. It is difficult to form an idea of our state of alarm during the long hours that followed our deliverance, for we knew by experience how bad the sea was. Cannon was repeatedly fired, but only the noise of the ice dashing against the ice answered us. All hands were placed over the eyes, as we tried to discover the missing boats amid the obscurity of the snow. The tempest continued to rage, and the sea to rise; a gloomy sorrow sat on all brows, and this sorrow was augmented towards evening, and blended with the mournful fact of a dark night. At length at eight o'clock the next morning, a shout of delight announced the boats, and a few minutes later our unfortunate brethren received from the entire crew the warmest and most sincere reception, for this life of dangers incurred in common developes in the

hearts of sailors a true sensibility, which pierces at certain moments through their rough manner.

"You have now followed the chase and capture of the whale, and have seen the dangers that awaited the fishermen in these seas hostile to man. The success of such expeditions especially depends on the confidence sailors set on the knowledge of their captain, and the personal courage of the harpooners. When the leaders are constantly unfortunate, they inspire no energy in the crew, and themselves lose their assurance, and favourable opportunities for attacking the monster.

"When killed, the whale is towed to the ship's side by the boats, which row one before the other like a team of horses, and it is fastened by ropes to the bow. It must be carefully fastened, for neglect on this point has more than once given rise to curious miscalculations. Since 1815, thanks to the bounty, one whale has been sufficient to clear the expenses of the voyage, and satisfy the outfitters. Not long ago, a vessel which had succeeded in killing one of these great creatures, was returning very proud of its triumph. The crew were giving vent to their delight, and the security was complete, for they were sailing a long distance from the ice banks. The captain and sailors thought it no harm to wet their triumph in a glass of spirits, and strengthen their hearts by a sea banquet, before proceeding to the nauseous

task of flencing. The festival was prolonged, but at length the flencers (*spek snyder*) went on deck with an air of importance and full confidence. While his comrades still abandoned themselves to pleasure, he went to take a master's look at the rich booty, which had cost them such fatigue. What was his surprise at seeing that the whale was no longer alongside! The ship, driven before the wind, had dragged at the whale, the cord had broken, and the animal had sunk to the bottom of the sea. The lesson was good, and at the present day such losses are rare. At times some portions of the animal, such as the head and tail, are employed to sheath the ship, for such a defence deadens the action of the masses of ice that dash against the ship's sides in these obstructed seas.

"When the crew have refreshed themselves with a dram, the bacon-kings (*spek-könige*), as they are called in our sea-talk, descend upon the whale, their feet being shod with steel spikes that prevent them from slipping. Two boats, loaded with knives and other cutting instruments, accompany them. The labour of these men has often been preceded by certain sea-birds, which, at the moment the whale is wounded, fasten themselves on the still living prey, dig their bills into the monster's wound, and greedily devour the flesh. During the flencing operation, it is very curious to observe the activity that prevails round the immense corpse. The size

of the whale has, however, been exaggerated. A few ancient naturalists speak of whales seen alive in the north seas, which were nine hundred feet long. Others, more reasonable, give this animal a length of one hundred and fifty to two hundred feet, but none of such a size are met with at the present day. It may be that the race of great whales has been destroyed, or that man, by incessantly killing these animals, no longer leaves them the time to develop themselves. I am inclined to believe, though, that the size of whales has not varied; and it is more reasonable to suppose that in old times our ancestors regarded with superstitious terror these giants of the seas, and exaggerated the size and strength of their enemy. At the present day, the largest whales are from sixty to seventy feet long, and that is a decent surface to attack. Two men, by working hard, can prepare three barrels of blubber per hour, which is afterwards converted into oil. A whale produces from twenty to thirty barrels of oil, generally used for lighting, though the Esquimaux drink it with delight. The meat of young whales is eatable and resembles beef, though it is a little hard. Sailors, especially in times of distress, do not despise this food, and I have even known old sea-dogs, who, after retiring from the service, and though surrounded by all the delicacies of civilisation, regretted the whale-steaks. The next

most valuable production after oil is whalebone; and although crinolines have driven it considerably out of trade, the sale of it is still considerable. The whalebone is separated from the animal's flesh, and, after being cleaned, is tied up in bundles of sixty blades. The flencing is now done on board, though formerly it took place at one of the fishing stations. No honest Dutch whaler, who has the love of country in his heart, has neglected visiting some of these coasts rendered so illustrious by the sufferings and magnificent settlements of our ancestors—such as Nova Zembla, the island of St. Maurice, and before all Spitzbergen. This mass of natural spires which pierce the sky, these monoliths whose base at times glistens like fire, but whose point is lost at a great height in the fog, these rocks whose black colour contrasts with the burden of snow that covers them—all this, seen from the sea, forms one of the most sublime horrors existing in nature, and thoroughly justifies the terror of the poor convicts, who were compelled to live in this world of ice and granite. To the west of Spitzbergen, were the Dutch posts and factories. By a natural reminiscence of their native land, they gave the name of the "Haarlem kitchen" to a spot situated a little distance from the island of Smeerenberg, where they had put up cauldrons to manufacture the oil. My father, who was a whaler like myself, assured me that he had seen,

in his youth, the remains of strongly-constructed buildings which had belonged to the Dutch company. In his time some houses even still existed in which the Dutch traders lived during the summer season. They were small; in front there was an immense stove surmounted by a roof, and behind it a single room which was enveloped in this artificial heat. Other sailors told me they had seen in regions not quite so near the pole the vestiges of old churches, built of stone, and erected during the summer. In winter, the nomadic fishing population abandoned these houses, which remained buried beneath the snow, but they found them again the following year. The churches of our ancestors now serve as dens for polar bears, and our works are disappearing from these unoccupied regions with the *souvenirs* of Holland. It has become difficult now to fix the position of the village of Smeerenberg; the wind and snow will soon have destroyed even the ruins and swept away the traces of our glorious enterprizes.

"The whale is certainly the principal object that attracts man to the Greenland seas, but is not the only one; for the walrus, seal, and polar bear are also hunted.

"Although it is difficult to associate the idea of summer with the continual presence of ice, there are fine days at Spitzbergen, which recal the mild climate of Holland. I remember, not without

pleasure, an excursion the captain and four of the crew, besides myself, made up one of the heights of the island. It was night, although it was day; the sun showed itself generously in the sky, but it merely diffused a light milder than during day, so that we could fix our eyes on it. We had climbed the rocks that command the English port, in order to follow at sea the track of a whale that had escaped us during the day. The mighty ocean lay expanded before us; in the middle of the port other fishermen were rowing in their long boats, which we could hardly distinguish. The ice-rocks, strangely built up, and crevassed with rents of the brightest blue, formed a gloomy contrast with the rocks that surrounded them. These rocks, some barren, others covered with a wild vegetation of moss and lichens, were imposing to look upon. Our imagination lent these irregular masses all sorts of shapes; they might have been called a granite vegetation, so capriciously were the blocks intertwined, like the trees of a forest. The air was so calm that we could feel the slightest breeze, and it was not cold. The beach was covered with walruses, or, as they are commonly called, sea-horses; they snored so loudly, that we could hear them though they were so great a distance from us. They might have been taken for a herd of cattle sleeping and ruminating on a prairie—this animal, in fact, has something

of the bull and of the whale about it. We greatly regretted that we were not within range, though this chase is not without its danger. Among animals, there is a species of mutual insurance against man; when you wound a walrus in the water, all its comrades flock up to revenge and defend. They come up in shoals, surround the boat whence the blow was dealt, and try to upset it. Most frequently, they bury their tusks in the bow of the boat, whose planks they pierce. The danger is heightened if you have the misfortune to injure one of the calves; the mother rushes forward with extreme courage, assisted by the other sea-horses, which will rise from the sea and try to scale the gunwale of the boat. The system of these animals of regarding every individual attack as a collective assault, would be very alarming if the fishermen in their turn had not invented a means of defence. In order to get out of a critical situation and repulse the attack of the furious walruses, sand is thrown in their eyes, which compels them to disperse. On land, they may be killed rather easily with cutlasses. One day we found two sleeping in a hole made in the ice: we stopped the mouth of the cavern with ice-blocks to intercept their retreat, and through the interstices we woke them up with our lances.

"When ships are not lucky at the whale fishery,

they turn their attention to seal hunting; some even, especially during the later years, have confined their pretensions to the capture of these animals. In my time, we did not trouble ourselves about hunting seals, except in our leisure moments. On a fine morning in May (at least for the Greenland seas) we were pulling along the coast of St. Maurice in a boat, the crew consisting of the captain, myself, a harpooner, and four oarsmen. You must have visited the arctic regions to form an idea of the silence. What we call silence in temperate climes is only a concourse of sounds, with which man's ear is so familiarised that he does not notice it. The calmest air is animated by myriads of insects, which buzz an imperceptible song; in the Polar Seas and on the coasts, even these feeble murmurs no longer exist; the sky is dumb as a tomb of ice. The noise of our oars, re-echoed from rock to rock, fell at equal intervals on this universal tranquillity of nature, and as sound is a relative phenomenon, it resembled each time the distant rolling of thunder. The water was motionless: a slight steam rose from the surface of the sea, and spread like a veil which the increasing light was beginning to blanch. From time to time the head of a seal formed a black and oily dot on the smooth waves, which resembled the ripple of an immense lake. The animal seemed to enjoy the sight of the boat,

then plunged again at the same instant, and a ring indicated the spot where the mirror had been broken. 'Pull,' the captain whispered, who had always a rifle in his hand, and was a skilful marksman. The boat redoubled its speed, the captain rose and fired. The shot echoed like the voice of a cannon in the sleeping morning atmosphere. The surface of the water had been rent by the bullet, and a blood mark soon bore witness to the fact that the captain's gun had not spoken in vain. The men bent over their oars, the captain took a glance at the surface of the blue abyss, and then muttered, with a shake of his head, 'Another shot lost.' In fact, the seal, mortally wounded, had sunk, and as there was no current at this spot, we could not find it again.

"Seal hunting is practised with more success in a different manner. For this purpose a day in spring, that period of the year when the animal is fattest, is selected. If you have the luck to come across a herd (for these sheep of Proteus generally lie together), you can kill them by a blow from a stick on the nose, and it is the affair of a moment. When a seal is killed, all the rest try to fly; but their retreat is prevented by the aid of the same sticks, and a great number may be obtained. The difficulty is in approaching them, for these animals are suspicious and restless. When sleeping on the beach (which happens very

often), they are careful to station a look-out; at the slightest noise the sentry gives the alarm, and the whole school at once run into the sea.

"An encounter with seals is a subject of amusement and recreation in the midst of the monotony of the Arctic Seas, even for the whalers, who do not specially devote themselves to this chase. They like to see them indulging in the most joyous sports and *fêtes*. We called such tumultuous sports 'seal weddings.' These animals are gentle; the voice of the young seals, in moments of distress, has something plaintive about it, which resembles the cry of a child. Music attracts them to the surface of the water, and I have more than once called from the depths one of these animals by whistling an air. The fishermen, who take advantage of everything, even profit by the seal's musical faculty to lay a trap for it. At the moment when, seduced by the song or the whistle, the animal simply raises its head and stretches its neck out of the waves, a bullet is sent between its eyes. The seal, moreover, is not a prey to be disdained, for it supplies several barrels of excellent oil, and its skin, if tanned, makes excellent shoes, while, if the hair is left on, the fur is waterproof. The seal is to the Esquimaux an animal as useful as the sheep to Europeans; it feeds them, clothes them, and all the oil of the animal they do not drink goes to keep the lamps burning. Although a child of the

northern seas, and of the ice country, the seal is very frequently found on the coasts of Holland, and even in the waters of the Zuyderzee. Near here there is a small island which I advise you to visit, called Urk. The seals appear to select this bit of land from preference to rest upon, and there are nights on which the inhabitants cannot sleep on account of the snoring of these animals. They are hunted, but are so thoroughly on their guard, and have such cunning sentries, that they nearly always get away. I know, however, on another island, called Rottum, a skilful marksman who does not miss them.*

"The greatest enemy of man in the polar regions, where everything combines against him, is the solitude after all. We perceived this by the feeling of delight the sight of bears produced in us. It is true that meeting such a fellow is dangerous. This formidable animal was, prior to the arrival of man, the sovereign of the Arctic regions; but since then he has seen his crown fall. The simple

* The little island of Rottum belongs to the province of Groningen. It is inhabited by only one family, the head of which is really a very skilful seal-hunter. This Dutch Robinson lives on his chase and by collecting the eggs which birds of passage deposit on the island. He sells the eggs to pastry-cooks at Groningen, and prepares the skins of the seals himself. It is calculated that a dead seal is worth eight florins. The fishermen of Scheveningen sometimes succeed in catching these animals alive, when they take them to town, and exhibit them.

sailors declare that he is angry with them for his deposition, and that a ferocious jealousy gleams in his eye at the sight of man. On the ice the polar bear is at home, and it is a hazardous job to attack it; but in the water, where it swims, however, like a fish, it can be killed without any great danger. One of them, harassed by a boat's crew in the Spitzbergen waters, offered a terrible resistance in my presence. It had succeeded in leaping into the boat and seizing the tiller; and the startled sailors at once sprang into the sea. They kept on the surface, supporting themselves on the oars and the gunwale of the boat. We hurried to their assistance, when the bear broke the head of two lances between its jaws, and was killed by a bullet without leaving its post. These animals are in great demand on account of their fur; and hence sailors attack them continually, and with extreme boldness. The flesh of the polar bear is not to be despised; the surgeon of our ship regaled the captain and myself one day with meat from one of these animals that had been killed for a month, and we took it to be beef. The Arctic regions are more inhabited than might be at first supposed, if we merely regard the barren rocks, the length of the winter nights, and the seas on which the sun only shines during the summer to illumine the ice. But this northern life is cold and colourless, and the animals are confounded

with the winding-sheet of snow that covers all nature; the very foxes are white. Our crew were highly amused one day by the misadventures of one of these carnivora, which tried to seize a seal sleeping on the edge of an ice-field. The fox advanced with stealthy steps along the edge, and then leaped on the seal, which, however, was aroused in time, and escaped by taking to water. The ice at this spot was extremely brittle, and the fragment on which the fox was at the moment broke off—we saw it floating rapidly before the wind: never did fox caught in a trap assume such a pitiful face as that of our crafty animal on its ice-raft, which, after a long and wearisome navigation, doubtless melted, and left the poor starving fox to the mercy of the waves.

"I have yet to tell you of the life the sailors lead in the midst of these uniform scenes where it is always winter. The manners of the whalers resemble those of other fishermen you are already acquainted with, except that they are more marked. The sight of the ice developes the feeling of religion; in the midst of the inclement regions of the Arctic Pole, you the more admire the hand of Providence, which feeds the birds on the rocks of Spitzbergen, which fecundates the moss, and bestows on man, a stranger to such countries, a pale sunbeam. The human heart is thus constituted; it is in privation and wretchedness that it

most yields to a feeling of gratitude. On Sunday psalms were sung on the deck. The poetry of the Bible, compared with the poetry of nature, with the sublime horrors we had before our eyes, with the majesty of the ice firmly seated on the depths, possessed a savage grandeur, which it does not attain even in our old churches. Our worthy Dutch sailors, they participated in the joy of the old Dutch navigators Barendz, Heemskerk and Ryp, the first time they told the name of God to the stern rocks of Greenland. Another feeling was associated in their hearts with the adoration of an invisible Being, the love of their absent country. The sight of the rivers of Spitzbergen and Nova Zembla, whose mouths are obstructed by ice, reminded us of the Meuse during winter. The song of the birds that frequent the islands of Greenland during the summer season, recalled to our minds the song of the sea-birds that fly over our dunes, and through a truly national habit we collected their eggs on the rocks, at the risk of breaking our necks.* Meeting the Dutch flag, which formerly

* The most luxurious tables in Holland set great store on the eggs of gulls and other maritime birds, whose flesh, however, is not eaten. Children and women carefully collect these eggs in baskets. To the north of the Texel, I saw a lofty cliff, which formerly formed a small separate islet, but which is now joined to the main island by a sand-dyke and the ground regained from the sea on this side. This cliff is known by the name of "Eyerland" (Egg island). The collection of these

had no rival in these seas, was greeted with an outburst of enthusiasm on both sides, for it was like an apparition of the mother country. We then thought of our wives, houses, friends, whose calm faces were perhaps collected round the lamp at the moment when it was day with us—a day without heat, like that of hearts which the family sun no longer warms. Lastly, one of the wants of man, weak and isolated, amid these polar solitudes, is to attest his existence by engraving proofs of his passage on more or less durable monuments. We were sailing along the group of Cary Islands in 1840, when our captain discovered one of those works which fixed his attention, and a boat was sent ashore to discover what it was. We found a pile of stones that reminded us of the *Hunebedden* we had seen in the province of Drenthe. Letters were carved on it; on one side of the monument, 'J—J. M—R. D.,' with the date 1827; on the other sides were the letters 'T. M —D. K.' Whalers had landed here in 1827, and doubtless left this evidence of their visit. Man lost in the polar solitudes, seeks all means to escape oblivion; it is dying twice to perish unknown amid the silence of the snow, and the insensibility of nature.

"The whale fishers were not insensible to the

eggs has become a branch of trade, by which families, and even entire populations live.

grand scenes that succeeded each other around them; and it is to our whalers that science is indebted for sounding the mystery of the Arctic nights. The terms of human language, however, are powerless to characterise the phenomena of a world in which all the laws of the known universe are, as it were, overthrown. There the day is no longer day, the night no longer night. The sun, for instance, remains below the horizon from about October 22nd to February 22nd. During this period of the year, night broods like a black garment over the snow-clad rocks and ice. This lengthened obscurity, however, is not so gloomy as might be anticipated. The flattened disc of the sun still approaches sufficiently near to the level of land and water to send them a species of twilight, which lasts for some hours. During the remainder of the time the stars glisten with extraordinary brightness; the moon appears at times for twelve or fourteen days in succession on the horizon; all these heavenly bodies shed a cold but clear light which, constantly reflected by the surface of snow, offers some resemblance to the light of day. Add to this the magnificent Aurora Borealis, which now and then kindles the sky like a furnace, and which to some extent offers a consolation for the gloomy solitude of the poles.

"The whale trade, by attracting man to these

uninhabitable regions, has really added a leaf to the physical history of our globe. Science came next; but it must not be forgotten that the road was opened by obscure sailors, whose devotion was the greater, the more terrific the Arctic seas were. For a lengthened period these interesting solitudes, and the phenomena of this silent sky, were only known through the narratives of the whalers; the storms, the ice, the polar bears alone know what became of many of them. The geographical knowledge of the hyperborean seas and regions formed the basis of our professional education. Although our object was not to discover new lands, our sailors advanced at times with rash curiosity beyond the fishing grounds. Heaven forbid that I should try to depreciate the recent enterprises of navigators! thanks to them, the curtain of eternal snow is partially rent asunder; new islands, among them Melville Island, that *ultima thule* of modern geography, have recently emerged from the bosom of the seas enchained by ice. It is merely necessary to compare our weak means with the material resources science now has at its disposal. The English navigators defy the winter of the poles in their warm, well-built, and well-provisioned cabins, and while away the length of the Arctic nights by indulging in all sorts of sports and amusements. Ashore, they fit up a theatre, and act farces in the same solitudes

where Barendz's poor comrades died of cold, hunger, and wretchedness in their huts. They have steam at their service, and the very ice can no longer bar their progress in the solid seas. Instead of sawing the blocks slowly and painfully, they summon to their aid an ally long employed in mines, gunpowder. By the aid of this explosive substance, which they insert in holes in the ice and fasten up, they blow up the obstacle, open up the crust of ocean, and thus 'cleanse' a considerable extent in a single day.

"The whale fishery, opened in May, generally terminated at the end of June, though some adventurers began it again in autumn. The ships that were not held by the ice then returned to the Helder. This life of danger, savage independence, and wrestling with the rigours of a northern nature, and the most terrible accidents, possessed for us a charm which nothing will compensate. I, who am an old man, feel like the polar bears when placed in our menageries: I feel a homesickness for the ice amid the luxury of a tranquil and relatively happy existence. I regret our infinite voyages, crossed by perils innumerable; I regret the majestic movement of the clouds, the deafening noise of ice clashing against ice, the sight of the bleak peaks veined with snow, the merry prattle of our comrades, the revelry after a successful chace, and, above all, the emotion we

experienced on seeing once again the flat coasts of Holland."

A few reflections will suffice to complete the recollections of the old Harlingen mariner. Among the causes which have produced the decay of the whale fishery in the Greenland waters, there are some which depend on the order of nature, and over which the human will is powerless. The race of whales, furiously pursued even into the middle of the ice, has certainly diminished in numbers: perhaps, this maritime monster is destined some day to disappear from the surface of the globe. In proportion as the desert is driven back, the elephant, hippopotamus, and rhinoceros become more rare. In proportion as the seas are peopled with vessels, and man advances to the farthest latitudes, the whales must probably undergo the same fate. At the present day this trade has passed into the hands of the Americans, who carry it on in the southern seas. With no other support than their industry and enterprising spirit, the Americans have sustained competition in all the markets of the Old and New World against other nations which protected the fishery. It is even for the welfare of their whalers that the Americans recently sought, by commercial treaties, harbours of refuge on the coasts of Japan.

I heard in Holland estimable economists deny that the whale fishery could be kept up either by

the Dutch or by other European nations. My conviction, contrary to theirs, is based on facts and figures. Never had this fishery before attained under the English flag the degree of extraordinary prosperity which it reached in the first fifteen years of this century. Must we ascribe this result to the premium, which amounted, it is true, from 1750 to 1824, to the enormous sum of two and a-half millions? I do not think so. The source of the development this branch of industry then received lies in a number of fortunate circumstances for Great Britain. The French Emperor, by closing the seas and occupying Holland, extinguished in the fleet of Dutch whalers a powerful rivalry for the English whalers. Political events at that day contributed, much more than any artificial encouragement, to consolidate the fortunes of the English fishery. War having annihilated the strength and resources of the Dutch fishermen, the Government of Great Britain offered all the immunities English citizens enjoy to Dutch whalers who were willing to settle in England.

Several of them took advantage of this invitation, and brought with them their capital, their industry, and their experience. Owing to this accession of fresh strength, the English whale fishery was pursued for some years with a success equalled at no other period. At the fall of the Empire in 1815, there was in England one hundred and fifty

excellent ships, and about six thousand sailors, engaged in the whale fishery in the northern seas. It is true that this trade did not maintain a state of prosperity, which was partly the work of circumstances; but, for all that, I find in official documents, that from 1813 to 1818, there were imported into England and Scotland 68,940 tons of oil, and 13,420 tons of whalebone; which, estimating the oil at £36 10*s.*, and the whalebone at £96 the ton, gives, with the skins, a total of £2,834,110, or an annual average of £566,822. In 1824 the premium was abolished; but I do not find that the fishery suffered greatly by this legislative measure; for, in 1825, one hundred and ten ships, with no other encouragement than their own interest, brought back to England five hundred whales, from which were obtained 6,370 tons of oil, worth £36 the ton, and 350 tons of whalebone sold at £250 to £300. This year five ships were lost. We see from these figures that the whale fishery carried on alternately in the Greenland seas and Davis' Straits, had not sensibly fallen off at either place. It was maintained till the year 1830, a fatal date in the annals of the fishery. In proportion, as owing to the new discoveries, the rampart of ice recoiled, so to speak, towards the Arctic Pole, the whales went with it; and hence it became annually more difficult to capture them. The ships, constantly entering further into the ice,

found themselves exposed to greater dangers, in spite of the progress of navigation. As a sad illustration of the fact came the year 1830, so fatal in disasters and tragical adventures; nineteen English vessels were shipwrecked, and twelve seriously injured, and the loss was estimated at the enormous sum of £142,600. These events exercised a pernicious influence on the whale fishery, which from this period followed in the northern seas a scale of slow but continued reductions. From 1844 till the present day, however, twenty-eight or thirty vessels have annually been employed in this trade, which struggles resolutely against so many obstacles, and several of them make considerable profit. A whaler recently returned to Hull with one of the richest cargoes of oil that ever was brought from the Arctic seas. The whale fishery has, consequently, undergone recently various fortunes in England; but if the statistics confess a movement of decrease, they contain nothing of a discouraging nature.

Besides—and this is the important side of the question—England, if she abandoned the Arctic seas, would not give up the whale fishery, but merely change the locality. It is not the same with Holland, which has remained a stranger to the whale fishery in the southern seas. The English chase in these new waters three species of great animals: the spermaceti whale, the black or

common whale, and the marine elephant. The spermaceti whale inhabits tropical regions, the coasts of New Zealand, and the adjacent seas. The ordinary duration of the voyage for a vessel that leaves an English port to seek these large and productive animals is three years. The common whale of the southern seas is found in several districts, but principally on the coasts of Brazil, and in the bays of Africa. The marine elephants of the southern seas are intermediary animals, forming the connecting link between the walrus of the Arctic seas and the seal. They are found everywhere in the seas that surround Desolation Island, the Southern Hebrides, and near the coasts of California. Every year, English fishermen capture a considerable number, and ships return laden with oil; for the marine elephant is said to produce more oil than the common southern whale. The ships, however, kill both indiscriminately, according as circumstances permit. The length of the voyage in pursuit of the common whale and walrus is from twelve to eighteen months. In 1842, fifty-nine vessels sailed from England, and the produce of the campaign amounted to £364,680. The success of the new fishery has re-acted powerfully on the old whale fishery in the polar seas; but though this has suffered, it is not annihilated.

France, like Holland, no longer figures in the same rank as formerly in the Arctic solitudes. In

1839, thirty-one French vessels, manned by 1000 fishermen, still sailed for Greenland, but in 1841 only four vessels proceeded to the icy seas. The government, however, considered it must display its solicitude for this famous fishery, by favouring it with pecuniary aid, whose total amounted in some years to considerable sums.

Is it now true that the Dutch flag has been eternally effaced in the northern seas where, at the end of the last century, it waved triumphantly? We do not believe it, and will not believe it. The whale fishery is perhaps the only one justified in claiming government protection, owing to the infinite risks that accompany it, and which often render it unproductive, or even ruinous. This protection, however, has not succeeded in raising it, and we may derive from such importance a fresh argument in favour of free fishery. What is required, would be to invoke the aid of the state less, and arouse the enterprising ardour of the nation more. Holland has had its glorious days in history, but the abuse of success has perhaps enfeebled that very success. In proportion as she grew enriched, capital became more timid, and men less confident in the chances of the sea. The economist could not regard without sadness the ruin of such a national resource; for the whale fishery, besides the profit attached to it, communicated a great impetus to the whole internal trade.

With this branch of industry a notable element of public prosperity has disappeared; but to raise it again, are not circumstances only required which would rekindle the zeal of a population that has ever remained laborious and strong? It is permitted us to believe that free trade and free fishery, by restoring the spirit of enterprise, will have this happy result. In the meanwhile, the duty of those who love Holland is to provoke, by the contrast of facts, the reawakening of a nation which only needs to become itself again, in order to regain an honourable rank in the Arctic seas, and obtain once again the advantages it has lost. Even if the seas of ice must be abandoned, nothing could prevent the Dutch, like the English, from seeking in the southern waters, a compensation for the northern fishery, and the means of regaining, on another stage, a celebrity which should not fall into the condition of an historic recollection.

END OF VOL. I.

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